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ECONOMY IN EDUCATION

*A PRACTICAL DISCUSSION OF PRESENT-DAY
PROBLEMS OF EDUCATIONAL
ADMINISTRATION*

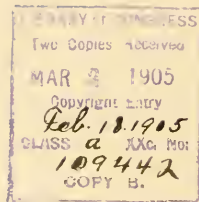
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PREFACE

This book is the third in the series of which "Psychology in Education" is the first, and "Method in Education" is the second. The purpose of the series has been to develop a consistent pedagogy, based both upon the physio-psychic growth of the pupil as an individual, and upon his functions as a factor in the social organism. The work throughout has been done in the light of current knowledge of individual and social growth, and has, it is hoped, been brought into accord with the safest theories and most productive practice arising out of that knowledge.

Education as a science is in its infancy, and no final word can now be written in any department of it. To reach fruitful results in the study of education the same thing is necessary as has been necessary to the upbuilding of any other science, namely, *inductive work*. The wait for trustworthy generalizations must be a long one, for observation, comparison, experimentation not only must extend over long reaches of time, much longer than in the case of many other sciences, but they are all vitiated by elements over which the observer and experimenter can have no control. The problem, "Given, the boy and girl; required, the properly educated man and woman," is complicated with more incalculable factors than any other problem awaiting solution at human hands.

It is urged that whatever in this book can be used, shall be the basis of further careful, continuous, experi-

mentation. Reading circles and pedagogy classes should select such matters as come nearest home to them and make of these a close, *intensive* study, using the material indicated in the copious references given.

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INTRODUCTION

The title given to this book is preferred to the older and more familiar one of "School Management" because it covers a larger field of educational activity than the latter term. What has heretofore been published in book form, in this division of pedagogy, has for the most part been confined to a discussion of the activities of the individual school as administered by a single teacher. But it is evident, under any adequate definition of education, that there are many other educational forces than those of the school, and that there are others than the teacher concerned in properly directing these forces.

The Title Defined.—"Economy in Education," as a division of pedagogy, *has to do with the conserving and directing of all the external influences which, combined with the innate self-activity of the pupil, produce the result we call right education.* As the words show, the concern is with the careful and economical use of *time, money, and energy* in equipping pupils to live their own lives rightly and to serve their community. Educational economy, as a science, strives to show how to prevent dissipation and loss of energy, about which Dr. Butler says, "The most serious aspect of the waste that surrounds us on every side is not the waste of time, [bad as that is]. It is the dissipation of energy, the loss of effectiveness, the blunting of natural capacity and aptitude."

Tompkins says, "At the moment of that effort on the

part of the teacher [to do good teaching], the whole school system stands pledged to the unity of inspiration of teacher and pupil. . . . The tax-payer is toiling for it; the commissioner of education is issuing his report to that end; the state superintendent is interpreting the law to strengthen the work in hand; the county superintendent is issuing orders for the good of the cause; and the schoolhouse, with its library, gymnasium, wall map, blackboard, crayon, pointer, and erasers, marshalls all its forces to the issue. The stove, the desks, the table, the curtains at the window, are all focusing their energy at the moment to bring the pupil's inspiration up to that of the teacher."

Economy Differentiated from Method.— Educational economy plans not only to focus these forces upon the pupil in school, but to focus all educational forces upon the aim of saving the pupil's mind and body, his efforts and interest, his health and energy; it means to save to a generation all that shall enable it to leave the work of the world further advanced and easier to do. Hence the range of educational economy is from the organization and management of the one-room country school to the planning and proper administration of state and national systems of education.

The objects of education, in the broadest sense, are to make the individual *able* to use all of himself, and to set at work within him *motives to use* all of himself rightly. Educational economy is concerned with every instrumentality by which these objects may be gained.

Educational economy and educational method alike rest upon psychology, but are different in function; economy deals with externals, method with the subject-matter of instruction in immediate relation to individual

mind. Economy plans the best attainable curriculum; method devises the best way of making the subject-matter of that curriculum take effect upon the individual. Economy establishes a system that shall harness all the educational forces of the community; method shows how to reach definite results in the individual through his reaction to different stimuli.

Divisions of the Subject.— The discussion of economy in education falls naturally under three heads: (1) the organization and management of the individual school; (2) the organization and administration of school systems; and (3) the correlation and useful direction of all the educational influences of the community outside the school. The whole subject may be conceived under three aspects, to which these divisions somewhat closely correspond, that of the individual teacher's work, that of the lawmakers' duty, and that of both as reciprocally related to the community.

The organization and administration of the individual school must be in the main the work of the individual teacher. No matter how well the school system may be planned, no matter how elaborate the care with which the state and local authorities attempt to direct the work of the schools, it is after all the teacher who makes the school an effective agency of education, or defeats the best efforts of others to do so.

On the other hand, the teacher works most efficiently when the school is a part of a well organized system. The creation of such a system is, of course, the work of the state or city, acting through its representatives. And these representatives should as closely study the laws of educational economy in order to an intelligent enactment of laws governing a system of schools, as they should

study political economy in order to an intelligent enactment of laws governing the business and political interests of the community.

But when the people of a community have secured the enactment of laws creating a desirable school system, the work of public education has scarcely begun. There must be close and sympathetic watchfulness by the public of its schools, teachers, and school officers, and a constant readiness to increase the efficiency of all these by correlating with them all the educational factors of the community.

ECONOMY IN EDUCATION

I. ORGANIZATION AND MANAGEMENT OF THE INDIVIDUAL SCHOOL

(1) THE RURAL SCHOOL

It is encouraging to note on all sides an awakening of sympathetic interest in the problems of the rural school. There are no others more important or more insistent demanding solution at the hands of educators to-day. No apology is necessary for devoting much space herein to the schools in which at least two thirds of the school population of the United States receive their elementary education.

A. EQUIPMENT

(a) Grounds and Buildings¹

Healthfulness and Beauty.—The first requisite in the material environment of a school is *healthfulness*, and the second is *beauty*, one of the elements of beauty being adaptation to an end. These two carry with them a third, comfort. To say that a schoolhouse should have a well drained site, a solid and water-tight foundation, and facilities for thorough heating and ventilation, as well as protection against the summer sun, is to utter

¹ Burrage and Bailey's "School Sanitation and Decoration"; Shaw's "School Hygiene"; Report of the Committee of Twelve (N. E. A., 1895); Iowa State Report, Nov. '99; N. E. A. Report, 1897: 306, 996; "The Ideal School House," *World's Work*, 2: 866; "Sanitary Legislation for Schools," Report U. S. Com. of Ed., '93-4, 2: 1301; State Report of Michigan, 1897.

commonplaces, but commonplaces to a realization of which many rural communities have not yet attained. And almost nowhere is hearty recognition given to the just claim that school surroundings should, if they do not foster, at least not offend, the æsthetic taste. Even the special Committee of Twelve, of the National Educational Association, who considered it well worth while to enter into minute detail regarding the structure, heating, and sanitation of the rural schoolhouse, had next to nothing to say about the beautifying of either grounds or room.

Explanations and General Specifications

Site and Position of House.—Where there is opportunity for choice, a site should be selected which affords good drainage, and is near no source of infection for air or water. As picturesque a spot as possible should be chosen. One of the marked advantages of country schooling is the opportunity afforded for a cultivation of the æsthetic taste.

The building should be so placed as to be protected from the north winds by means of trees or a rise of ground, when these are available, and it should look to the south; that is, the windows should be in the south side, thus to secure better light and greater warmth in the winter. In some sections of this country, however, local conditions demand just the reverse of this; the schools are taught mainly in the summer and early fall months, and when this is the case, the houses may better have the northerly outlook.

Fences and Entrances.—Often, in sparsely settled communities, it is just as well to have no fence, and to let the schoolhouse stand in the midst of the natural grove or on top of the picturesque hill, without inclosure of

any kind. The natural environment is quite attractive enough without any special yard boundary within which to confine the ornamentation of grounds. Neither is there need of a fence in thickly settled communities, where stock laws are vigorously enforced, the sole reason for a fence being found in the fact that the yard, if set with flowers or plants, should be protected from the depredations of straying animals.

But if fences are built they should be of the strongest and simplest construction, with stout and well hung gates.

The Yard.—Without waiting for a formally announced “Arbor Day” the children should be encouraged to set out and take care of native trees, ferns, mosses, and vines. The real sense of communal possession and social continuity, as contrasted with a selfish and evanescent individuality, has but recently begun to take possession of us in this country. The man who suggests planting shade trees along the highway for the benefit of travelers yet to come was, until very recently, more apt to be laughed at than encouraged. An indifference to any but one’s own present wants has long stood in the way of a beautification of public property. Teachers should see their opportunity and duty in this matter, and they and their pupils should take pride in leaving the school yard in better condition than they found it.

The county or township superintendent will find it well worth his while to offer some sort of prize for the school that makes the greatest improvement in the appearance of the school yard during a term. The teacher will find it a plan repaying a trial to appoint, from his pupils, a “hold over” committee on care of house and grounds, whose duty it shall be to keep a general supervision of the schoolhouse and school yard during vacation, and to

see that the premises are in good condition for the beginning of the next term of school. This committee, with a little encouragement, would plant flowers, and tend them through the summer, in order to have an attractive yard by the opening of school.

But, at the same time, it should not be forgotten that if no other playground is accessible, the right of the children to the school yard for purposes of legitimate play should not be unwisely abridged.

The Schoolhouse.— There is no excuse or justification for the unsightly boxes with sloped roofs that pass for country schoolhouses in most parts of the land. With but little more, or with no more, money than is now spent on these unæsthetic structures, one-room houses of simple and tasteful architecture could be erected. It is true economy in every case to get an architect to prepare the plans, but in the event that this can not be done, recourse should be had to some of the ready-prepared plans so easily obtained. Excellent ones will be found in Circular No. 3, 1891, issued by the United States Bureau of Education, and in the Iowa State Report of 1899. Nearly any other sort of architectural contrivance is preferable to the plain rectangular box with a wedge-shaped roof, which has so long and so inefficiently done duty as a country schoolhouse.

The outside walls should be painted or stained in some quiet color either blending or contrasting harmoniously with the setting of the house. Harsh, glaring, pronounced colors should be avoided.

The aim throughout should be to set an object lesson before pupils and patrons, so they will say with deep pride, "That is *our* schoolhouse," instead of "That is the schoolhouse."

Foundation.—This should be of stone; bricks are too absorbent of moisture. If stone is too expensive, then well-seasoned posts, charred or tarred, will serve, but they should be closely boarded over. In any circumstances, the foundation should be made as nearly moisture-proof as possible.

Entrances.—It is best to have two entrances to the schoolhouse, one for boys, the other for girls, and each entrance should lead directly into a cloakroom, from which exit may be had into the schoolroom, through a swinging door. Each entrance way should be protected by a porch or stoop, where should be placed both a foot scraper and foot wiper, special care being taken to see that the children use these articles thoroughly.

Cloakrooms.—The house should be planned large enough to allow a space at least six feet wide and running the entire width of the building, to be set aside for cloakrooms. There should be a solid partition between the two cloakrooms and each should open directly into the schoolroom. In each cloakroom there must be a good supply of hooks, and two shelves about $4\frac{1}{2}$ feet from the floor running entirely around the room. There should also be an umbrella holder; a joint of ten inch glazed pipe, closed at one end, serves admirably and is very cheap. The drainage from wet umbrellas should never be permitted to run on the floor.

A wash stand, a basin and pitcher of some non-breakable material, and a roller towel, are necessary to complete the equipment of the cloakroom.

Floor.—The floor should be double, i. e., closely fitted narrow flooring laid upon a first floor of wider boards with thick carpet paper, or something better, between. A floor with cracks and gaping seams, admitting streams

of cold air, is far from economical. The surface should be finished with some sort of durable and smooth floor varnish; a floor that can not be freed of dust and dirt is ultimately expensive. The best modern sanitation demands, also, that wood floors in all public buildings shall not be dry-swept, but oiled and wiped or brushed.

Walls.—These may be of any material suited to the foundation. A most comely and serviceable schoolhouse may, in fact, be built of logs from the ground up, and will be far more comfortable than a building clapped together out of unseasoned boards. Within, the wall surfaces should be too smooth and hard to hold microbe-bearing dust, but should be finished without glare, in some quiet restful tint, preferably a light gray with a faint trace of green in it. Eyes are too valuable to be exposed to the merciless glint of white walls.

The walls should meet floor and ceiling with a curve, not at a sharp angle, so that dust and dirt may be easily removed.

Windows.—The schoolroom should be lighted from *one side only*, by several large windows placed quite close together and occupying a large portion of one wall. They should begin about three feet from the floor and extend to within a few inches of the ceiling. The window surface should be from one sixth to one fourth of the floor surface, and the windows should run up as high as possible so that the opposite dead wall may be lighted fully.

The admission of light may be controlled from the inside by means of light-colored, translucent shades rolling up *from the bottom*. A very convenient shade is now supplied by dealers, which both rolls, and slides up and down on vertical rods. This arrangement permits of so

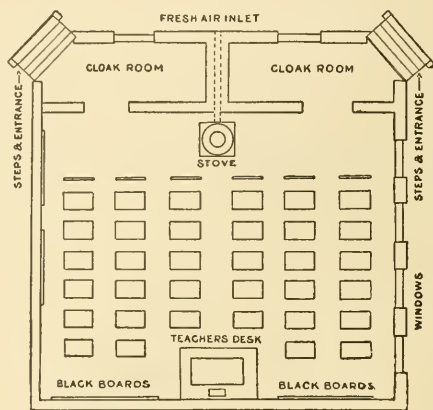
adjusting the shade as to meet the sun's rays at whatever angle they come. The sun's glare and heat may be controlled from the outside by means of shutters.

The window sashes should fit closely and be securely hung with counterweights.

Air Space of Room.—The minimum air space of a schoolroom, per pupil, is fixed by law in some states, and should be so fixed in all. There should be afforded never less than 200 cubic feet of air space for each pupil whose name appears in the school census for a given district. In this way, allowing for an attendance always somewhat less than the census enumeration, there is sure to be enough space for all who do attend. Such provision would require the ceiling to be at least twelve feet from the floor, and each pupil would have not less than sixteen square feet of floor space.

Heating Apparatus.—A good means of heating, and at the same time ventilating, one room or many is a hot air furnace placed in the basement or cellar. Few rural schools can afford this, however, and may use with nearly as good results a ventilating stove, which can be secured through any hardware dealer. But if for any reason this can not be obtained, the principle upon which it operates may be quite successfully applied to any ordinary heating stove in the following way: Select a stove with a wide, flat bottom, and set it up, without legs, in a shallow box filled with sand. Bring the outer air directly against the lower part of the fire-bowl, by means of a pipe passing through the wall at the floor. The outer end of this pipe should be flush with the outside wall and covered with heavy, close wire netting; the inner end should terminate in a sort of bonnet or hood which will serve to deliver the cold air directly upon the

stove. The stove should be placed in one end of the room quite near the wall, and the pupils should be protected from the direct radiation of heat by means of a semi-cylindrical shield of tin or sheet iron, which, by reason of its shape, will stand on end without other support, and which should have wooden handles on the sides



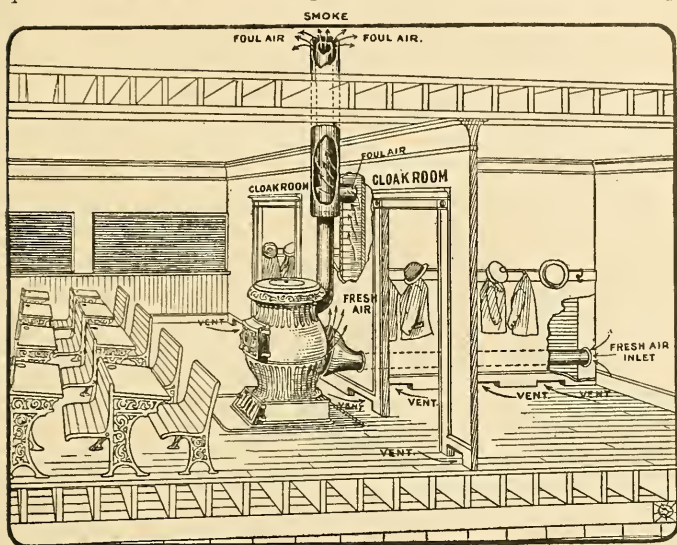
Floor Plan of Schoolroom

by which to lift it about. By keeping the stove well heated the whole room will receive, by convection, a supply of fresh, heated air, and yet, by reason of the shield, pupils nearest the stove will experience no discomfort.

It is time the old and long accepted way of heating with an unshielded stove in the middle of the room should be everywhere definitely abandoned. It is a fruitful source of discomfort and disorder.

Ventilation.—The heating arrangement just described provides for a sufficient inflow of fresh air. But there must also be a correspondingly free outflow of impure air, and this is best provided for by passing a short pipe from the space between the cloakrooms into the safety

flue around the stove pipe, as shown in the diagram. By this plan, currents of air pass from the schoolroom through the vents shown at the bottom of the wall, and after partially heating the cloakrooms, and drying the wraps, pass by the vents at the bottom of the cloakroom partition walls into the space between them, and so up



Plan for Warming and Ventilating

the safety flue, which thus serves both to protect against an overheated stovepipe and to ventilate the building.

(b) Furniture and Apparatus¹

Desks and Seats.—The furniture of a schoolroom should be of the simplest and strongest make, with the fewest possible fittings to get broken or out of order.

The teacher's desk should be placed upon a low stage, not over ten or twelve inches high, at the end of

¹ Shaw's "School Hygiene"; Burrage and Bailey's "School Sanitation and Decoration"; "Hygienic Desks," Educational Review, 18: 1, 9.

the room opposite the entrances. This stage should be so fitted to the wall and floor as to prevent dirt from accumulating around it and under it.

The children's desks and seats must be *single* and *adjustable*. Desk and seat should be in no way connected, but each should be separately screwed to the floor. The trouble experienced with some patterns of adjustable seats, which a big boy may work loose by a few vigorous pushes, may be obviated by using seats with a three-toed pedestal—one toe projecting rearward and two at a wide angle frontward. The greater the leverage the chair has for holding, the less the leverage the boy has with which to press it loose.

No desk or seat should have any hinged part, or anything about it that can flap, slam, or creak. It may be added here that loose floor boards, creaking doors, and rattling windows should be immediately attended to; sources of noise of any kind should be reduced to a minimum.

There should be a table of ordinary height about which the older pupils may quietly gather to consult books, or to read the periodicals; and a low table for the little people is almost indispensable.

Ink and Holders.—The ink problem is a serious one, and promises to remain so. It will not be solved until an ink holder is invented that will not tip over, that can not be used to make noise, and that will not offer temptation to the pupil to fill it with chalk dust or paper.

Blackboards.—If the windows are all on one side of the room, as they ought to be, the opposite wall should be covered with blackboard as high as the older pupils can comfortably reach. The blackboard should also extend low enough to accommodate the little people.

A good material for blackboards is a preparation similar to a heavy oilcloth or linoleum, which may be cut to any length and fitted to any space. When possible, the blackboard should lie flush with the wall surface, and the joint should be smoothly finished. If a strip of molding is used to cover the joint, the upper edge should have a very flat bevel so as not to hold dust.

The ideal arrangement for crayons and erasers is a trough in two sections, lying close against the wall at the lower edge of the blackboard. The upper section should be made of wire netting with a mesh that will let dust and all pieces of crayon less than three fourths of an inch long drop into the lower section. This lower section should be easily removable, so that it can be taken out and cleaned frequently.

When really dustless and greaseless crayons and erasers come on the market only that kind should be used.

Maps and Globes.—Only a small equipment of maps is necessary. What are needed should be printed on strong material and hung on spring rollers. The outfit will vary to suit local demands, but the following items are necessary everywhere: (1) A map of the world, (2) a map of each hemisphere, (3) a map of the United States, (4) a map of the state, (5) a commercial map, which should show clearly the standard-time divisions, (6) a development map, showing the territorial growth of the United States.

Although not absolutely necessary, two globes, costing not over half a dollar each, will be found very useful. One of them should be an ordinary map globe; the other should have a blackened surface upon which drawing may be done with chalk.

Rural school boards can not be too strongly advised

against wasting money in the purchase of expensive globes and "tellurians."

Arithmetical Aids.—Arithmetic should be taught objectively in all classes, but the apparatus needed, except a dissected sphere and a set of cube-root blocks, can be made by the pupils under the teacher's direction, or, as in the case of measures, brought by them from home. Even the dissected sphere, for illustrating the rule for finding solid contents, and the cube-root blocks, may be made by pupils advanced enough to use such apparatus. In fact, it should be the teacher's aim to have the pupils themselves construct as much of the illustrative apparatus as possible in all subjects.

Lamps.—If the schoolhouse is to be used as a gathering place for the purposes described later, it must be provided with means of artificial lighting. It is safe to say that very few rural schoolhouses are supplied with good lamps; and it is equally safe to say that any schoolhouse so supplied is worth educationally fifty or seventy-five per cent more to the community than the same house would be without the lamps.

Books and Bookcase.—No matter how freely the school may be supplied with books from a traveling or circulating library, as in Ohio and New York, it should have a permanent collection of books of its own. Books of reference are just as properly classed as "apparatus" as globes or a set of mathematical blocks. One of the prime purposes of a school is to teach pupils to use books as *tools*.

Every school must have at least an authoritative unabridged dictionary and a good encyclopedia. As many more books of reference as can be secured should be added, and a few standard periodicals.

But none of these will be of much service unless proper provision is made for taking care of them. If the school owns but one book, there should be a bookcase in which to keep it. No book should ever be given out without being charged to the pupil who takes it.

It would be wise to provide a case in the lower part of which could be kept apparatus and other illustrative material when not in use. One corner of this case should be set aside to accommodate the item next described.

“Emergency” Medical Case.—So long as sports and games are what they are on country school playgrounds, so long will it be advisable to have at hand some simple remedies for bruised flesh, cut fingers, sprained ankles, and possibly worse hurts; and any teacher would be glad to have within quick reach a few of the common, homely medicines for the sudden ills with which children are sometimes seized. Such a case should be furnished, among other things, with bandages, courtplaster and surgeon’s plaster, arnica, ammonia for bites and stings, vaseline, turpentine, camphor, an alcohol lamp, and a supply of alcohol for quickly heating water or other liquids.

Drinking Facilities.—The water supply should be most carefully provided and guarded. For country schools a deep, driven well is best. Shallow wells, cisterns left uncared for and stagnant during half the year, and springs, unless most favorably situated and in thinly settled regions, should not be used. But whatever the source of supply, it should be carefully examined and put in proper condition before the opening of school.

The best water vessel to be used is a large, *unglazed* earthen jar, set in a plain box just large enough for its sides to be tangent to the jar, and with large holes bored in the bottom. The jar should be fitted with a good

cover, and should have a self-shutting faucet. The unglazed walls of the jar permit water to seep through them, and the evaporation of this from their outer surfaces keeps the water quite cool even on a hot day. If the jar can be put where there is no danger of breakage, the box is not needed; without it, the air comes more fully in contact with the jar.

The jar should never be kept in the schoolroom, but should be set, preferably, upon a stand or bracket in the porch or entry. Each child should have his own drinking cup, and should use no other.

B. ORGANIZATION AND ADMINISTRATION

(a) Grading and Grouping ¹

The fact that in a large majority of country districts the time and energy of the teacher and pupils are wasted through an unnecessary multiplicity of classes is sufficient justification for saying something further upon the subject of the ungraded, or, as it has been more properly called, the "poly-graded," state of the rural school.

One extreme of the ungraded plan, or lack of plan, exists in a few remote districts even to-day. The teacher will be found hearing at least as many recitations daily as he has pupils, and usually more; there are no classes, and each pupil comes up and reads or "does his sums" as he gets ready or is called.

The opposite extreme is found in some of our overgraded, hyper-systematized city schools. The country school may, if it will, enjoy a golden mean between these two extreme conditions. The country teacher has opportunities for liberty of action, original initiative and experimentation, and freedom from deadly mechanism,

¹ Report of the Committee of Twelve (N. E. A., 1895); Circular No. 6, 1884, U. S. Bureau of Education; The Public School Journal, 12:307.

which his more closely beset city brother may well envy him. There is room in the management of a country school for a flexibility of arrangement and administration that does not seem, so far, to have been attained in city systems.

Divisions.—The process of putting system into the country schools will be facilitated by grouping the grades into three divisions—Primary, Intermediate, and Advanced. Such an arrangement has the merit of being both correct in theory and familiar from long usage.

The first or primary division, made up of the first three grades, includes pupils whose capacities are still chiefly at the elementary acquisition stage, and for whose instruction therefore the teacher relies mainly upon their interested contact with their *material* environment, natural and artificial. The second or intermediate division, made up of the second three grades, includes those for whom no less stress should be laid upon acquisitional exercises, but who should begin to have their assimilative powers more specifically called into play, and their normal muscular activities directed to consciously creative expressional work. The last or advanced division, consists of the two highest grades, and in this, without permitting either class of the activities specifically operative in the other two to flag, the teacher should aim to cultivate especially the higher social feelings and their correct expression in conduct and behavior; and should direct with increased care the creative capacities with their concomitant expressional tendencies.

However, too much stress must not be laid upon psychological¹ distinctions between these divisions; there are no hard and fast lines of demarcation between them,

¹ Consult Roark's "Psychology in Education," p. 252, *et seq.*

and they are to be used quite as much upon grounds of expediency as for psychological reasons.

Classifying.—A class is a group of pupils of the same degree of advancement in a subject. Every school should be classified as closely as possible, for at least two reasons — (1) in order to save time and energy, and (2) in order that the pupils may profit by the spirit of emulation engendered by class work.

Every pupil of normal capacity of body and mind should carry not fewer than four studies, and should therefore be in that number of classes. If there are no other conditions affecting the case, each pupil's studies should be adapted to the principle of correlation developed below, pp. 211-215. That is, the pupils of Division I. should have at least two specifically acquisitional exercises daily, one assimilational, and one expressional in addition to the incidental expression accompanying all exercises. The pupils of Division II. should have about the same assignment of subjects, but the emphasis should be slightly shifted so as to rest somewhat more upon the assimilational and expressional; and those of Division III. should be led to do more thinking and expressing than they did while in Divisions I. and II.

Grading.¹—In the present condition of educational nomenclature the terms "grade" and "grading" are used with more than one meaning. "Grading the school" may mean placing the pupils in the coördinate classes where they belong; or it may mean marking off the course of study into divisions based upon the relation of one subject to another; or, again, it may refer to the proper grouping of studies in successive years.

A grade is a group of classes of coördinate rank. The

¹ Report of the Committee of Twelve (N. E. A., 1895), p. 94.

distinction between a class and a grade is not observed so closely as it ought to be either by those who write of these things or by those who organize school work.

A pupil is "classed" if he is grouped with other pupils doing the same work in the same branch; he is "graded" if he is doing work of the same degree of advancement in several different subjects. Plainly, then, he may be classed without being graded. The ideal condition is found when the pupil is both classed according to his individual needs, and is so graded as to come into contact with the various subjects of the curriculum at the same level.

Number of grades.—In spite of efforts, and of theories that have never reached the level of effort, the necessary number of grades remains at seven or eight. The time of a grade should not be more than one year, and in the country schools it can not, in the face of present conditions, very well be less. There is no way of grouping which will allow profitable work to be done by throwing classes that should be in separate grades together in regular study. The few exceptions that may be made support the rule. There are other and more rational and effective ways of saving what the rural teacher so much needs, time.

Advantages of Grading.—Proper grading and classifying have other marked values besides that of saving time. In the first place, the pupil's ambition is aroused to stay with his grade, to allow nothing to make him so irregular in attendance or lax in effort as to occasion his demotion. Many a pupil is held to effective effort by his simple determination not to let another pupil get ahead of him, although he cares but little, at first, for knowledge or school work as such. There is none of us.

young or old, but will go faster if he has a good "pace maker." This stimulus the pupil must have in order to work effectively, and he will have it if he is well classed, even though the school is not closely graded.

But the impulse of a larger ambition will be felt if the teacher can inspire his pupils with the love of learning, can make them lay hold upon the things of the mind, and if at the same time the school is so graded that, upon finishing the course it offers, the pupil can, without hitch or break in his progress, go right on into the higher work of the next school above. Even an enthusiastic teacher finds it difficult to fire the ambition of a pupil to do higher work, when progress through the curriculum is so irregular that an extra year or two must be spent in bringing up work which was neglected because of poor grading, but which must be completed before admission can be had into good secondary schools.

But in case there is neither intention nor opportunity of entering upon a higher course, the pupil nevertheless takes great satisfaction in having completed some definite and rounded course of study, even though it be only elementary. In recognition of this fact, many state systems provide for the graduation of pupils from the common-school course. It is no uncommon thing to see the large public room in a little country town packed with parents who have driven miles to be present at the "graduation" of son or daughter. It is not possible to estimate all the helping force of such an event, or the evil waste that happens when a pupil, as is too often the case, enters school in the fall only to take up the same studies and go over nearly the same ground as in the last term. Ungraded school work is very apt to begin anywhere and arrive nowhere.

Practical Difficulties in Grading.—In many instances the practical difficulties in the way of grading the country school are so great that the teacher does not even try to overcome them, and contents himself with “hearing lessons” and drawing his pay. Often, the parents are so indifferent and careless about everything that touches the real welfare of the school that they lend no encouragement to any effort to put school work into orderly arrangement, and may become actively hostile to any attempt to do so, if their children should be “turned back” or prevented from taking whatever studies they desire. It not infrequently happens that a father or mother sends a peremptory note or verbal order forbidding the teacher to require “Sam” or “Sara” to pursue certain branches. The father who thinks his son needs no schooling beyond a little arithmetic in order successfully “to run a farm,” the mother who thinks it is not “nice” for her daughter to study physiology, the overgrown boy who thinks composition and grammar distinctively feminine branches and will therefore have neither, these are by no means extinct species and still try the souls of faithful teachers who would bring order out of ungraded chaos.

Nor do the teacher’s troubles with grading stop here. He must also contend with the chronic irregulars, with those who attended a “subscription school” last spring, and with those who should have been demoted long ago, but who were not because of lack of backbone in his predecessors. And if to all these things there is added, as too often is the case, the active opposition of the teacher to a system of grading, or to system of any kind that requires real work at his hands, then the outlook is indeed gloomy. But the people of an American com-

munity can have anything they want, and when they come to understand what a well graded country school means, and really want it, they will have it.

(b) Suggestive Scheme of Gradation¹

As indicated in a previous paragraph, the matter of grading may be considered first as to the number of grades, or steps, into which each subject falls naturally, and second as to the number of studies and other exercises that can economically be put into each grade, or year of study. The following schedules representing these two aspects are offered as embodying the results of actual experience in communities of widely different conditions. The effort is here made to present something suggestive and adaptable.

The subjects that shall make up a common school curriculum are here taken for granted. The right of these subjects to a place in the course of study will be considered later.

The present discussion precedes that of the administration of the school, because the grading of school work can not be done wholly by any one teacher; it is part of the life, the continuity, of the school, and is accomplished and maintained by successive teachers; while the administration of the organized school is the work of each individual teacher.

Grade I.—Chart Grade² (4 to 6 recitations daily; 8 to 10 minutes to a recitation.)

¹ Refer to Roark's "General Outline of Pedagogy," p. 5, *et seq*; Report of the Committee of Twelve (N. E. A., 1895), p. 161; Revised Course of Study for the Common Schools of Illinois; "Uniform Course of Study of Indiana"; Prince's "Course of Studies for Elementary Schools" (two reports, 1897, 1898, Boston); Circular of Information No. 6, 1884 (Bureau of Education, Washington); McMurry's "Course of Study for the Eight Grades."

² For methods of handling the work of each grade, see Roark's "Method in Education."

Reading, with writing and spelling, twice daily.

Arithmetic. Counting; reading and writing figures; fundamental operations to two places, once daily.

Geography and Nature Study.¹ Outdoor, objective oral instruction, once weekly, combined with similar work in next two grades.

History and Civics. Simple stories, told and read, with illustrations drawn from every day experiences, once weekly, combined with similar work in the next two grades.

Language. Conversations, with special aim of securing *fluency* on the part of the pupil. Incidental correction of errors of pronunciation, enunciation, and syntax. Much of this should be done in connection with the other exercises, but, if possible, a special exercise should be devoted to it at least once a week.

Drawing should be practiced in connection with other exercises, especially nature study and language.

Vocal Music, in common with the other grades of the first division, daily.

Seat Work,² at desk or table. Selected kindergarten employments, cutting and folding, modeling familiar objects in clay and sand.

Grade II.—(4 recitations daily; 10 to 15 minutes to a recitation.)

Reading, with spelling and writing, twice daily.

Arithmetic. Fundamental operations continued; "wet" and "dry" measure and simple long measure tables built *objectively* by the pupils, reading and writing of simple fractions, with objective illustrations; United States small coins; Roman numerals to L.; "information talks" upon quan-

¹ Every teacher should consult, for suggestions in Nature Study, Wilson's "Nature Study in the Elementary Schools"; Longman's "Object Lessons"; Jackman's "Nature Study for the Common Schools"; Bert's "First Steps in Scientific Knowledge"; McMurry's "Special Method in Science"; Hodge's "Nature Study Leaflets" (Clark University); Report of the Committee of Twelve (N. E. A., 1895), p. 142; Needham's "Outdoor Studies."

² With seat work constructive outdoor occupations may often be alternated in all the grades.

tities and their expression, as *dozen, week, fortnight, month*, etc., once daily.

Other exercises as described in Grade I., and combined with those of that grade. Language in this grade should be both oral and written. Simple "information talks" in hygiene should be begun.

Grade III.—(4 recitations daily, 10 to 15 minutes to a recitation).

Reading, with spelling and writing, twice daily. There should be a good deal of *supplementary* reading in this and the next two grades.

Arithmetic. Review, with many practical drills, of the number work of previous grades; fundamental operations in numbers to three places; addition and subtraction of simple fractions; simple applications of arithmetic to ordinary household affairs, once daily.

Geography. Modeling reliefs in sand and clay; review of geographical terms learned in previous grades; map drawing and use of wall maps begun, once a week.

Nature Study. Observation of leaves, fruits, seeds; recording weather conditions (daily); study of birds' habits and usefulness, once or twice a week.

Physiology. "Information talks" continued, on the senses and on the hygiene of the skin, teeth, and hair.

Other exercises, as described in Grade I., carried forward to suit the pupils' advancement. Some of the simplest sloyd exercises may be introduced in this grade.¹ Constant practice should be afforded in both the oral and written use of English, based on the subject matter of other exercises; "memory gems" should be introduced.

Grade IV.—(4 recitations daily, 15 to 20 minutes to a recitation.)

Reading. In the Reader three times a week; in selected supplementary reading twice a week.

¹ Refer to Reports of U. S. Commissioner of Education, '92-3, 1: 1193, and '95-6, 2: 1132; Compton's "First Lessons in Wood Working"; Kirkwood's "Sewing Primer"; N. E. A. Reports, '88: 570; '89: 104; '90: 828; '01: 100, 257.

Writing in copybooks, or from the teacher's black-board copy, daily.

Spelling from the reading lesson, daily.

Arithmetic. Multiplication table completed and drilled upon; tables of measures and weights thoroughly learned; simple exercises in common and decimal fractions; business forms and practical problems drawn from the pupils' experiences, once daily.

Grammar. Oral lessons on the easier parts of speech, illustrated from the reading lessons, two or three times a week.

Geography. Simple lessons with the globe, and continental relief maps, once or twice a week.

Nature Study. Outdoor lessons on soil, trees, insects (uses and disadvantages), once or twice a week.

Physiology. "Information lessons" on the organs of respiration—their physiology and hygiene, hygiene of eating, once a week.

Civics. Oral lessons, illustrated by current events, once or twice a week.

United States History. Stories told or read, in chronological order, with incidental use of the map, once a week or oftener.

Language. Memorizing and correct recitation of short literary selections; model letters; short compositions, written without special preparation, upon topics suggested by other school work; careful drill upon the mechanical side of composition (capitals, punctuation, spelling, etc.), once or twice a week.

Drawing and Music continued as before.

Seat work. Elementary sloyd.

The pupils of all grades should be encouraged and helped in their spontaneous efforts at making things out of school. There should be occasional exhibits of such work.

Grade V.—(4 to 5 recitations daily, 15 to 20 minutes to a recitation.)

Reading. In the Reader twice a week, alternating

with selected supplementary reading three times a week.

Writing as in Grade IV.

Spelling as in Grade IV. Special attention to spelling in all written work.

Arithmetic. Mixed numbers; L. C. M.; square and cubic measure (simple objective problems); percentage begun; practice to make fundamental processes automatic, once daily.

Grammar. Incidental to the reading and to all language work. No text-book.

Geography. First half of text-book, once daily.

Nature Study. Observation and record of *habits* of plants and animals; verification of weather proverbs, once or twice a week.

Physiology. Oral lessons in the anatomy and physiology of osseous and muscular systems; hygiene of exercise, once or twice a week.

United States History combined with civics. Elementary text, or lessons as suggested in Grade IV., once or twice a week.

Language. "Memory gems" once a week; written exercises and simple compositions in connection with other work, especially nature study.

Drawing mainly in connection with other work.

Vocal music mainly at opening exercises and rest periods.

Sloyd, in some form adapted to the conditions of the school.

Grade VI.—(4 to 5 recitations, 20 minutes to the recitation.)

Reading. Selections from literature two or three times a week. Regular use of Readers discontinued.

Spelling as in last grade; oral spelling drill with two upper grades once a week.

Writing. Practice for speed and legibility three times a week.

Arithmetic. Proportion; simple interest; computations of the farm and market, once daily. Special attention should be given to securing *clearness*, *accuracy*, and *rapidity*.

Grammar. Good text-book combining much practice in language with some technical grammar, once daily.

Geography. Text-book completed, once daily.

Nature Study. Observation work continued as indicated in Grade V.; simple experiments in physics once a week.¹

Physiology. Elementary text-book, or oral lessons on the anatomy and physiology of the digestive system, once or twice a week.

Other exercises as described for Grade V.

Grade VII.—(4 to 5 recitations, 20 minutes to a recitation.)

Reading. Selected literature, with class discussions, once a week.

Spelling as in Grade VI.

Writing as in Grade VI., twice a week. Careful attention should be given to the penmanship of all written exercises, whether on blackboard or paper.

Arithmetic. Review and drill for accuracy and rapidity; interest continued; simple problems in square and cube root; applications in various industries, once daily.

Grammar as in Grade VI.; diagramming of easy sentences, once daily.

Geography. No text-book needed; applied geography in current events.²

Nature Study. Observation and record of the life history of some living thing, plant, animal; illustrated oral lessons on the simple machines (pupils should make the machines), twice a week.

Physiology. Elementary text-book taken up and completed, once daily.

U. S. History. Text-book begun; geography references and drawing of illustrative maps made prominent, once daily.

Civics incidental to history.

Language. Forensic exercises weekly; written work as in previous grades.

Other exercises as in Grade V.

¹ Refer to Cooley's "Experiments in Physical Science"; Holbrook's "New Method"; Trowbridge's "Physical Science at Home."

² Roark's "Method in Education," p. 190.

Grade VIII.—(4 recitations, 20 to 25 minutes to a recitation.)

Reading as in Grade VII., perhaps less often. The aim in the two highest grades should be to cultivate a knowledge and love of *good literature*.

Spelling as in last grade.

Writing only in connection with written work in other subjects.

Arithmetic. Simple algebra introduced; geometric forms and terms; mensuration, once daily.

Grammar. Text-book in grammar; parsing and diagramming, once daily.

Geography as in Grade VII.

Elementary Science. Simple experiments in physics and chemistry; review of physiology with oral lessons on domestic sanitation, once or twice a week.

U. S. History. Text-book completed, once daily.

Civics. Elementary text-book taken up and completed, or subject combined with history, as in Grade VII.

Language as in Grade VII., with special attention to forensics.¹

Other exercises as before.

The gradation of the curriculum just outlined may be called "ideal" only in the sense that it will probably not be realized in actual practice. But a critical study of it will show, it is believed, its adaptability to almost any local conditions. If the school is made up mainly of young pupils, the higher grades of work will not be needed, and more time can be given to the lower. If the school has pupils properly classifiable in each grade, the alternation of some of the heaviest work of the upper three grades may be practiced.² Classes may recite on alternate days, or some grades may be organized only

¹ Roark's "Method in Education," p. 318.

² Consult the "Report of the Committee of Twelve" (N. E. A., 1885), p. 94, *et seq.*; Revised Course of Study, Ills., introduction; County Superintendents' Monthly (Fremont, Neb.), vol. 3, p. 8; vol. 5, p. 296.

in alternate years. If the school is over-crowded, as is the case in many districts of the South, where one teacher often has charge of from forty-five to seventy-five pupils, and the community will not or can not provide for a salaried assistant, the plan of pupil help (the Lancasterian system) may be very profitably employed. See page 69.

(c) Taking Charge

The following suggestions may seem unnecessary, but they have proved helpful to more than one young and inexperienced teacher, and when it is remembered that from a fourth to a third of the teachers who go into the schoolroom each year are there for the first time as teachers, no apology seems needed for introducing these matters into this division of the subject, designed primarily for the teachers of elementary rural schools.

Selecting a Boarding Place.—Even the selection of a boarding place calls for the exercise of care on the part of the teacher going into a community for the first time to make his home there through a term of school.

He should remember that he must be a hard-working student, and therefore needs quiet surroundings, a private room well lighted and heated, and an atmosphere of culture, in which to spend his time when not in the schoolroom. He owes it, then, to himself and to his pupils to secure accommodations with a family that can fully meet these reasonable requirements, a family of substantial means, of unquestioned standing in the community, whose members care at least as much for books and magazines as for “parties” and other neighborhood excitements.

Getting Acquainted.—In states where the directors (or trustees) are required by law to visit the parents of

the district before school opens, the teacher should, if possible, go with them. But, while it is better for the teacher to be in company with the school officials when visiting the parents for the first time, still if he must go alone he had much better do so than not to call upon the parents at all before school opens. A grave drawback to the highest efficiency of the rural school is the lack of acquaintanceship, and therefore of sympathy and coöperation, between parents and teacher. The tactful teacher can do much, by this preliminary visiting, to win the parents from the attitude of indifference, not to say suspicion or semi-hostility, with which they are apt to start their children into a new term of school under an untried teacher.

While on this topic it is well to say that the visiting of parents by the teacher should not stop with this. It should be done from time to time throughout the term, not in any formal or perfunctory way, but cordially, sympathetically, helpfully. The proper carrying out of this suggestion will smooth away many a wrinkle.

Although no one would care to see a revival of the old custom of the teacher's "boarding 'round," yet it afforded excellent opportunities for the blending of home and school influences, and for extending the teacher's helpfulness beyond the schoolroom.

Inspection of Grounds and Buildings.—Before beginning the work of the term the teacher will do wisely to see that all promised repairs to the schoolhouse and grounds have been made, and that everything, within and without, has been put into proper condition for a good opening of the school. He should especially examine the water supply, the closets, and the blackboards.

Opening School: the First Day.—There is only one

other day, the last, that is more important than the first one of the term. To begin well is to diminish greatly the possible wear and tear of school work, by engaging interest and inhibiting disorder from the first. To end well is to secure pardon for many errors and shortcomings that may have marked the passing of the term. To close brilliantly after a whole term of successful work, is to "set" psychologically the results of that work, as the dyer "sets" a color.

For the first day of school the teacher, especially if he be new in that community and most especially if he be also assuming charge of his first school, must make, beforehand, most careful and detailed plans. No one can more quickly or surely detect inability to handle a situation than children, and if the teacher shows incapacity and confusion during the first half hour of school it will take him many anxious days to get matters well in hand, if indeed he can do so at all.

The best possible remedy for the embarrassment which the new teacher can not avoid feeling is, in addition to having a clear, definite plan and adhering to it, *to lose his self-consciousness in a genuinely sympathetic interest in the pupils.*

The teacher must be at the schoolhouse early on the first day, and meet each pupil at the door or on the playground, with something pleasant to say and with sincere interest in whatever individualizes him. Particularly must care be taken to learn names; nothing else gives the teacher quite such a ready hold upon a pupil as to be able without hesitation to call his name correctly from the first, and to show quick sympathy with whatever idiosyncrasy he has.

The teacher's plan for the first day should include (1)

well conducted opening exercises of song, devotions, and a short, inspiring talk; (2) the prompt assignment of every pupil to new and interesting work; (3) the conducting of *regular recitations*, at least during the afternoon; (4) the quiet assumption that everything will go smoothly; and (5) the calm but prompt suppression of the first tendencies to disorder. If such a plan can be successfully carried out the *first day* the battle is more than half won.

No matter if the teacher closes the first day in a condition bordering on nervous collapse, it should be his pleasure as it certainly is his duty, to take care that every pupil has made at least two recitations, and goes home feeling that his personality has been recognized, ready to say of the new teacher "He'll do."

(d) Conducting the School

The problem of successfully conducting the school is in the main, one for the teacher to solve alone. No matter what may be the material equipment of the school, no matter how carefully the plan of grading has been formulated, no matter how earnest and sympathetic the community may be in helping, the school will be a failure, if the *teacher* has not power and will to make things work together for success. It is for the teacher to remove, as far as possible, all provocations to disorder, and to cultivate assiduously everything that helps good order and good work. Upon this point are focused all the efforts of educational economy for the individual school.

Granting to correct method all the importance to which it is justly entitled, still the fact remains that the proper *management* of the school is even more important. The best method of teaching a given subject can not take

effect upon a mismanaged school; but pupils trained to good school economies, good school habits, by proper management, have that which will be of far more value to them than merely knowledge of the branches studied. Pupils trained to habits of attention, industry, promptitude, and accuracy, will learn, method or no method. It is the inability to do economical work, to grasp and administer details, and to get their pupils to do so, that causes so many teachers to fail, just as it causes people in any other business to fail.

General Principles of Management

The Less "Machinery" the Better.—The school should run with as little machinery as possible, and that little must go very smoothly, without creak or jar. All routine movements must become automatically correct early in the term.

Relations of Teacher and Pupils.—The teacher must stand to the pupil as a sympathetic, kindly, wise and helpful friend. He should begin the term by eliminating harshness and suspicion; as certainly as he assumes that the pupils are ready and anxious to do wrong, so certainly will they do what seems to be expected of them. Let the assumption be that the boys and girls will behave well, and will work if their work is attractive and helpful; let it be taken for granted that, unless the physical or psychical environment causes irritation, the conduct of the pupils will be that of well-conducted busy people anywhere. Very much is to be gained by this attitude of the teacher. If he will, from the first moment of contact with his pupils, put the stress upon happy activity, upon the *work* and their common interest in it, and not upon his own authority as a sort of police-

man, the most difficult problem of the school will be almost solved.

By intelligent sympathy, by quick appreciation of the pupil's difficulties and capacities, by the exhibition of a genuine enthusiasm for the work of the school, by courteous bearing, having in kindly respect each child's personality, the teacher can have the spirit of the school *with* him instead of against him, can create an atmosphere which the evil doer will find hard to breathe.

No Rules.—One way of simplifying school government is to publish no "rules." When a list of rules is read and posted up, the ingenuity of at least some of the pupils is stimulated thereby to devise the doing of things that are not prohibited by the rules but which are, nevertheless, infractions of good order and good work. The teacher's hands are tied by his "rules," for if the things named therein are punishable, then any school boy's logic is equal to positing the converse, that things not named therein are *not* punishable. Every child old enough and with sense enough to go to school at all knows how to behave there, and needs no "rules" to tell him.

Unhampered by rules, the teacher is free to decide each case of order upon its individual merits.

The Teacher's Example.—The fact can hardly have too much iteration, that the *personality of the teacher* is the most potent factor in the making or spoiling of the school. If the teacher is tardy often, no amount of prodding will make the pupils come on time. If the teacher lounges behind his desk, and is indifferent to neatness in his personal appearance, the pupils will sprawl and be untidy. If the teacher is rude, or boorish, or discourteous, the pupils are thereby deprived of an opportunity to grow into good manners. Unless the

teacher is alert, active, enthusiastically interested, and has some exact scholarship, if only in an elementary way, the pupils will work perfunctorily, getting nothing but a little superficial book knowledge, which amounts to no more than a thin veneer.

But, above all, or rather superadded to all, the teacher must have *love* for his pupils and for his work; without this, even having all the others, he is sounding brass and a tinkling cymbal.

Self-government the only Real Government.—It must not be forgotten for an instant that the aim of the public school is to produce good citizens, and that the good citizen in a republic must be able to behave well. It is a truism that ninety-nine hundredths of the business of courts and civil officers would be eliminated if every one in the community could or would govern himself, his impulses, emotions, appetites. All the crime that is committed in society is directly traceable to a lack of self-control. What is true of the individual is true of the state; a free, self-governing state can not exist except as it is made up of free, self-governing individuals — free through conformity to law, self-governing through subjection of motive to the dominance of moral will.

It is the business of the teacher, therefore, to train his pupils into habits of self-control and ready obedience, a self-control and an obedience that shall become more and more automatic as time goes on.

Self-government through Motives.—Conduct, either of child or of adult, is the result of *motives*. The reason for any course of action is always to be found in the motive that prompted it.

It is precisely at this point that the teacher gains most from a practical psychology, a psychology that uses the

school room as a laboratory. If he can but know the motives of his pupils he can play upon them as upon an instrument. The teacher's rule of action here must be, *Appeal always to the highest motive to which the pupil will respond.* That motive in one case may be love of approbation, in another fear of ridicule, in another personal pride, in another ambition, in another, perhaps, fear of physical pain. The highest possible motive to right action is the *rightness of the action*; the lowest possible is the fear of punishment. Between these extremes the teacher must range, always striving to lift each pupil to a habitual responsiveness to the highest possible for him.

Punishments

It is far better so to conduct a school as not to need to punish at all, and it is very often quite easy to do so. But under no circumstances must the pupils be allowed to conclude that punishment of all kinds has been wholly eliminated. In no other matter is a more careful study of the individual pupil needed than in adapting punishments to the results sought. Here is another reason for having no set rules for the school; punishment in school must be fitted not so much to the transgression as to the transgressor, and fixed rules would not admit of this.

Punishment by Deprivation.—One chief aim of school training is, as was set forth in a preceding paragraph, to give the pupil self-control. Self-control consists, practically, in denying one's self an immediate object of desire in order to obtain a greater satisfaction later. Punishment, then, should consist, whenever this is possible, in some form of deprivation; when the child has learned that he can not enjoy both the immediate

and the remote good, and that the remote good is better, and well worth sacrificing the near one for, he has had his first lesson in self-control.

When it is said that punishment should usually take the form of deprivation there is given a reason why under no circumstances should any *school duty* be assigned as punishment. The wise teacher prefers to manage so that school duties, even though difficult, should be looked upon as *privileges*, and the denial of a share in them as a deprivation. It is by no means so difficult as it might seem to teachers who have never tried the plan, to bring the school to a level where it shall be deemed a punishment to refuse a pupil permission to recite or to take part in some other exercise. Surely many, if not all, of the exercises of the school can be made so full of interest and value that to be shut out from any of them shall be felt as a deprivation.

Corporal Punishment.—In all that has been said so far no mention has been made of whipping. Present sentiment everywhere, and in some places law, is strongly against this mode of punishment, and the arguments against it are familiar to everyone. But the fact remains that some children can not be made to respond to any higher motive than fear of a sound whipping. Such punishment is very rarely needed, but the bare possibility of it is often a wholesome deterrent, and no teacher can afford to let it be understood that whipping is abolished.

Purposes of Punishment.—Punishment has two purposes or aims — (1) to reform the offender, (2) to deter others from transgressing. In the latter respect it differs from many other forms of discipline, using discipline in its broad and true meaning, for the effect of most

disciplinary measures should be positive, encouraging directly to right doing, rather than negative, merely deterring from wrong doing.

The Teacher's Relation to Punishment.—The teacher must, as far as possible, in administering punishment, take the attitude of an impersonal agent of law. Law-breaking must be followed by correction, as cause is followed by effect; the teacher is simply the medium through which correction comes close after evil-doing. He must make the offender feel that punishment is the necessary and inevitable result of any infraction of the law inherent in school life, and must make it plain that the law is in the real nature of things and is not a "rule" made by the teacher. Much of helpful suggestion upon this point will be found in the chapter on "Moral Education" in Spencer's *Essay on Education*.¹

Arousing and Sustaining Interest

But it was the mistake of the older educationists to suppose that "school management" is chiefly a matter of discipline — using discipline in the narrow sense of restraints and punishments. Discipline in its broader, truer sense has a comparatively late acceptance; and yet long before Herbart many teachers knew that the best "management," the best economy of work in the individual school, is through the pupils' interests; but all teachers have known this and have been helped by it since Herbart's doctrines have become everybody's.

The Doctrine of Interest.²—As at present held by

¹ See also "New York Teachers' Monograph" for March, 1900; White's "School Management," p. 190; Tompkins' "School Management," p. 157; Pedagogical Seminary, 6.

² See Herbart's "Outlines of Educational Doctrine," Chs. IV. and V., Sec. II.; DeGarmo's "Herbart and the Herbartians," Ch. V.; "Interest

those who have thought—and fought—their way through the mass of talking and writing upon the subject, the doctrine of interest may be stated in two propositions: (1) that the interests with which the child begins school life must be used as a starting point from which to direct his activities; (2) that the teacher must use all means to arouse and sustain the pupil's interest in the work he has to do. The doctrine should not be construed to mean, as some of its over-zealous advocates have claimed, that the child's interests are to be the guides all the way, and that nothing is to be required of him in which he feels no interest. The genuinely disciplinary value of drudgery must not be lost sight of — real, downright *drudgery*. This simply means that it is not always the *immediate* interest that must govern; that frequently the remote interest must prevail over the present impulse. However distasteful the task, it must be done willingly because of a strong and inspiring interest in that to which the drudgery leads.

Neither should teachers fall into the error of mistaking mere evanescent and artificially induced impulses for genuine interest. Such impulses are only superficial ticklings of the mind and afford no real motive or direction to fruitful activity. There is no more ghastly sight than a room full of children galvanized into a feeble alertness by the palaver and gesticulations of a harassed teacher with a professional waxen grin, simulating an interest she never feels.

Classes of Interests.— The genuine interests are those that are rooted in the perception of *utility*, the perception of *causality*, the pleasure of *achievement*, the enjoyment

As Related to Will," Second Supplement to the Herbartian Year Book, 1895; Educational Review, 11: 146; Ziller's "Grundlegung zur Lehre vom erz. Unterricht."

of the *beautiful*, and the various forms of the *social instinct*.

Any pupil does better work for understanding the application, the utility, of the subjects studied. If this fact were only made the basis of curriculum planning the result would be the elimination of much that has had a prominent place for decades, and a setting of much else in a different perspective.

One of the chief pedagogical values of nature study is the challenge it constantly offers to the desire to know the *why* and the *how* — the causes and reasons of things. If this desire be even slightly stimulated and directed it grows stronger through life and leads ultimately to the heights of research and philosophy.

The most unfailing and ever deepening well-spring of true interest is the joy of *achievement*, of doing something for the sake of doing it — of doing it well for the sake of doing it well; the pleasure of knowing in order to know, of overcoming resistance for the sake of having conquered. Until the teacher can smite the rock of indifference and apathy and cause the love of work for work's sake to gush forth, he may not enter into his rightful heritage. School work should not be put down to the level of the pupils' superficial interests, but their deeper interests should be lifted to the level of duty. It is criminal to remove all distasteful tasks from the school life, for in that way is the child enfeebled and unfitted for the stress of life beyond the school.

As already indicated (and no chance must be let pass for putting stress upon the matter), the school yard, the schoolhouse, and the furnishings of the room should all be of such kind as to foster the æsthetic interests of pupils and teacher.

But all these are individual interests, and to complement them and make them wholly sane and safe there must also be cultivated the *social* interests, the right out-working of which fits the man or woman for the functions of citizenship. Civic pride, true patriotism, a broad altruism, all these must be given soil and air in which to flourish mightily, else the public school fails of its highest duty. How immeasurably more work for the teacher to do than merely to "hear recitations!"

There is no surer way to set the feet of the young upon the road that leads to learning, to power, and to character than by keeping alive in all its freshness and vigor the *capacity to become interested* which, as children, they have in such marked degree.

But the pupils' interests can not always be aroused by direct efforts to reach them through the content of the studies; and even if they could, other means should be availed of as well. Each interest should be multiple, and should be called out by contact of the pupil's life with as many wholesome things as possible. Therefore not only should the subject-matter used as a basis of instruction be presented objectively and in a way to make the pupil see its value for practical life, but other matters than those found in the usual prescribed school course of study should be introduced frequently and freshly.

Opening Exercises.—It is very regrettable that many schools neglect so simple and efficient a means of interesting the pupils as daily opening exercises afford. When carefully planned and intelligently carried out they constitute an effective remedy for tardiness and irregularity of attendance; they can be made so attractive that the pupils will let nothing get in the way of prompt attendance upon them. With intelligent preparation on the part

of the teacher the school can be made, for the first quarter of an hour each day, a sort of psychic storage battery in which to lay up enough power to facilitate greatly the day's work. The following may be taken as a type of these exercises, which should be varied frequently and made piquant and fresh.

Program of Opening Exercises for a Monday Morning

A song by the school.

Reading of the Parable of the Talents, with comments, by the teacher.

Repetition of the first six verses of Proverbs 13, by the school, led by the teacher.

Two minutes' talk by the teacher upon the week's motto (written on the board): "It pays to do more than you are paid to do."

Music on the violin, by an invited guest.

A report of the chief news of the last week, made by an eighth-grade pupil previously appointed for that duty.

Announcements and special directions for the day's work, by the teacher.

An analysis of this type will show several valuable elements of economy.

Devotional Exercises.—Where state law or local opposition does not prevent, the Scripture reading should be a regular feature of the program, because of its cultural and ethical value, to say nothing of the need of simple religious teaching, for the lack of which public schools have been so criticised.

Mottoes.—An excellent practice of the old-time school which the latter-day school should not permit to fall into disuse is the placing of mottoes or proverbs before the pupils. There is much testimony to the value of this practice; men and women grown declare the influence exerted by the motto in the copy book or on the black-

board, which, catching the idle eye of childhood, has sunk into the sub-consciousness, and has there touched the springs of character. The teacher will do well to have a different motto written on the board in some fixed place every week, calling the attention of the whole school to it with a few pointed comments or illustrations.¹ Biographical illustrations are especially good, incidents showing the influence the principle of the motto has exerted upon the work of some well-known man or woman. The *personal* element always holds the interest of young people.

Music.—In addition to its high cultural worth, a piece of music rendered, even crudely, by some one not a member of the school has two values; it serves to break the routine of the school and to awaken interest more than if given by the teacher or a pupil, and it identifies the community with some part of the work of the school. This latter service can hardly be overestimated. When some one outside the school is asked to speak, to sing, to play, or otherwise to contribute something to the special exercises, not only the friends of the one thus contributing take a new interest in the school, but the whole community awakens to a sense of sharing in the work the teacher is trying to do. The teacher will, of course, always be at pains to make the public feel welcome at all school exercises, especially at those which open the school each day and at those which close the week.

Current Events.—By nothing, outside of the regular class work, can the interests of the pupils be more surely or profitably quickened and broadened than by the discussion of "current events." Such discussion should constitute a part of the usual work in the classes in geog-

¹ Refer to White's "School Management," p. 293.

raphy, history, and civics; but it will prove profitable to have some advanced pupil, a good, discriminating reader of the news, give on each Monday morning an outline of the chief events of the preceding week, which shall serve both as a resumé of what the school may already know, and as a guide to the current reading of the coming week. So rapidly has this feature of school work grown in favor that there are a dozen or more news publications in this country now, designed exclusively for use in schools. It is well to have the pupils feel that there is something of value they can do for the school as an organism — something besides “saying lessons,” and this reporting of the news they can do well and with profit.

If there are any variations to be made in the usual program, or special announcements of any kind to be made, the close of the opening exercises, when everybody's attention is alert, is a good time to make them.

At the end of a quarter of an hour spent as suggested in the last few paragraphs, the whole school is refreshed and brightened for the daily tasks, and the work goes much more smoothly than if it be taken up without any opening exercises. This feature of school work needs most careful and intelligent planning.

The central theme of the program shown on page 50 is “current events,” and this theme may be used every Monday. Some topic taken from elementary science may be the central theme for Tuesday, one from literature for Wednesday, and so on through the week.

Daily Closing Exercises.—While it is not expedient or desirable to have special exercises with which to close the school every day, still it is well to have a regular formal closing of the day's work, and to have occasionally special exercises, as simple and brief as possible.

Before the pupils are dismissed in the afternoon they should be brought to "attention" (sitting squarely in the seat, facing the teacher), and then the teacher may give a word or two of comment on the day's work just finished, or upon the conduct of the school, or as to what he wants done the next day; or he may let them go with a simple and hearty "good-bye." Sometimes there may be a song, or a concert recitation of a "memory gem," or a brief gymnastic exercise, or a bit of practice with the flag salute. There should be variety and freshness, vim, and brevity, so all may go home feeling that school is a good place.

Observance of Special Days.—Every state now makes provision for an arbor day, which is observed more or less closely by the schools, according to locality and the disposition of the teacher.

But it will be found greatly helpful to observe other special days also. "Bird day" is growing in favor, and it is well that it is. Local Audubon clubs will gladly coöperate in the exercises on such a day, and the occasion can be made of high value in inculcating a knowledge of birds, in showing their protective service, and in cultivating the pupils' humane and æsthetic instincts. The following is a suggestive program easily varied to suit different schools:

Program of a Bird Day

Wall display of colored photographic pictures (with names) of the birds most common in the locality.¹

Concert singing by the school of a bird song, found in any good school song book.

Brief statements by different pupils of the economic value of

¹ These pictures may be had, at very slight cost, from the Nature Study Publishing Co., Chicago, Ill. Refer also to Wright's "Citizen Bird," and Blanchan's "Bird Neighbors."

birds to farms and orchards, with illustrations gained by their own observation.

Reading by the teacher of the state law against the slaughter of song and insectivorous birds. (Pointed comments should accompany the reading.)

Brief descriptions, by pupils, drawn from actual observation, of the feeding, nesting, migration, and other habits and characteristics of the birds of the vicinity.

Reading or recitation by a seventh-grade pupil of a selection from Burroughs's "Birds and Bees."

Reading or recitation of the following selection, or one similar:

THE BROKEN WING.

In front of my pew sits a maiden,
A little brown wing in her hat,
With its touches of tropical azure,
And the sheen of the sun upon that!

Through the bloom-colored pane shines a glory,
By which the vast shadows are stirred,
But I pine for the spirit and splendor
That painted the wing of that bird.

The organ rolls down its great anthem,
With the soul of a song it is blent;
But for me, I am sick for the singing
Of one little song that is spent.

The voice of the preacher is gentle;
"No sparrow shall fall to the ground;"
But the poor broken wing on the bonnet,
Is mocking the merciful sound.

The birthdays of authors, scientists, inventors, and others who have added to the world's comfort and happiness may be observed and celebrated in the same way. The dates of such days, and biographical sketches and suggestive programs, are given in any good periodical publication intended for teachers in the public schools. Such exercises should not be too frequent, and the longest

program need never occupy more than an hour, and seldom need so much time be used. It should not be necessary to add that every program must be carefully and thoughtfully prepared beforehand, by both teacher and pupils. Let nothing *drag*.

To these exercises the public should always be made welcome; parents especially should be cordially urged to attend. No opportunity should be let pass for getting the parents into the schoolroom, so they may come to understand and coöperate with the work of the teacher.

If any teacher reading this section should here say that he has no time for such things, it being necessary to spend every hour in the "regular grind," let it be said in reply that if these special exercises be well and judiciously used, if the *spirit* of them be fully entered into, the regular grind will go faster and the "grist" will be better.

Prizes; Marks; Reports

False Incentives.—Prizes of the sort usually given for successful work in school are false incentives, taking the emphasis off the thing that is good in itself, that is study for the sake of knowledge and power, and putting it on things that are educationally worthless. But this is not to condemn wholly the giving of prizes; properly managed they may be made to stimulate effort to a point where the child may see for himself the value of work and the profit of its results. Prizes should always be so given as to stir some deeper and intrinsic interest as soon as possible. It is safe always not to give *medals*, or anything else valuable in itself, except books. The more the attention is drawn to the prize itself and taken off that for which the prize stands the more worthless it is as a good incentive to effort. An apt illustration of this is

found in the Olympic games. They were at their best when the prizes were simple wreaths of olive or oak, and their decadence was marked by the introduction of costly gifts for the victors.

In any school a card, a bit of ribbon, a simple badge with appropriate inscription, or, for older pupils, a wholesome book, will be far more serviceable than gold or silver medals. To be of the highest value prizes should be awarded for the most marked and rapid *improvement* under given conditions, rather than for absolute accomplishment. In this way the stimulus reaches all, and the slowest pupil has a chance of being touched with the fire of ambition.

True Incentives.—It is worthy of many repetitions that the true incentives to successful work are the pupils' own aroused interests in the things about them, in material things and in the facts and relations of their immediate practical life and of the larger world. These interests can best and most surely be aroused through the strong, informed, and enthusiastic *personality of the teacher*.

Marking.—The discussion which, some years ago, raged over the matter of marking pupils has decided nothing unless it be that marking of some sort can not well be dispensed with. The marks may be made with "plain figures," in old-fashioned per cents, in letters, in symbols, or in voluminous statements of the teacher regarding the psychic condition of the pupil; but the stubborn fact remains that marking of some sort must be done. The teacher can not otherwise keep track of the pupils' growth or lack of it. In none of the grades, however, except those of the third division (seventh and eighth grades) should any attempt be made at *daily*

marking; and not in these is it necessary, if even expedient. Marking may be done most frequently in arithmetic, technical grammar and spelling; less frequently in reading and other culture studies.

Country schools have suffered far more from a lack of marking than from an excess of it; and where schools have been harmed by marking it has been due to such lack of skill on the part of the teacher as to make the fact of marking obtrusively evident to the pupils, and to the practice of giving marks almost solely upon examination results.

The best time to mark a pupil upon a piece of work is immediately after the work has been done. But unless the teacher has acquired enough facility in estimating the value of a recitation, and enough skill in handling a class, to enable him to mark work as soon as it is done, without interrupting the flow of the class interest, he had better make his memoranda at some other time, as, for example, just after the class is dismissed.

In addition to recording the results of ordinary recitations, the results of reviews (which should be frequent and spirited) should also be carefully noted. Examinations should be estimated as only one third, or at most one half of the total for a term.

There should be close marking for absences and tardy attendance. Many teachers find it also an admirable plan to keep careful account of the pupils' deportment; but under no circumstances should a pupil be marked off in *scholarship* on account of poor deportment; the two accounts should be kept carefully separate.

Making Reports to Parents.—A monthly report of the child's progress is due the parent; and if this is not reason enough for sending it, a sufficient one is found in

the fact that a report, showing progress or retrogression, sent home every month, makes the parents cognizant of the work being done by the pupils, and acts, in every case, as a spur and incentive to both parents and pupils to make that work better. It serves effectively as one means of correlating the influences of the home and of the school. The report should show "Attendance," "Department," and "Scholarship," for at least the upper four grades.

School Expositions

The old-time school "exhibition," with its declamations, essays, and dialogues, aided much in its day in the always needed correlation of school and community. It can still be made of great service, but should be used in connection with the more modern and effective school "exposition." The exhibition was not usually planned as a means of showing the results of work done as a part of the regular school exercises; it was intended merely to "show off" the pupils and entertain the local public. The "exposition," on the other hand, has for its purpose to direct critical and appreciative attention to all of such regular school work as can be exhibited objectively. The exhibition showed off the pupils; the exposition shows their regular work.

Practice in oral expression should constitute a very considerable part of the regular school work, week after week. The results of this also can be shown in a modified form of the "exhibition," which may be made an integral and important part of the exposition plan.

Preparation of Exposition Material.—One very marked advantage of the exposition is that the preparation for it is best made as a part of the regular work, and

instead of distracting attention from study, as preparation for a school "entertainment" is sure to do, it serves to concentrate attention and effort upon the ordinary duties of the school. The method of preparing and collecting exposition material is simple:

In all nature-study exercises there are collected many specimens in course of regular work, pressed flowers and plants, fruits, seeds; clays, soils, minerals; insects in various stages of development; and some of each pupil's best of all these should be laid aside by the teacher about every two weeks, and kept for exposition purposes. There will also be pieces of simple apparatus made by the pupils to illustrate elementary physics and chemistry, and these, too, should be kept in good order for use on exposition day.

In geography and history, the outlines, topic lists, brief descriptive essays, flat and relief maps, and illustrative drawings, all of which are produced as a part of the regular school work, make most excellent exposition material.

In arithmetic and other mathematics, model solutions, mathematical drawings, and mathematical models made by the pupils from wood, clay, or cardboard, furnish valuable exhibits.

Written work in all subjects, outlines, diagrams in grammar, illustrated essays, and drawings and hand work of any and all kinds, done as a part of school duty, should furnish many typical specimens to be put on display.

Correct methods of teaching involve the preparation of all the material suggested above, and it remains only to collect the best specimens of each pupil's work at stated intervals and to file it away. The collection of material

should begin in the second week of school, and the pupils should understand from the beginning what the material is being collected for. If the exposition idea is a new one in the community, it will be well for the teacher to show some material secured in his last school, or from some fellow worker, so that the pupils may get the idea and be stimulated by it from the first.

Arousing Emulation and Ambition.—As the material is collected from time to time the best specimens should be shown to the whole school, with comments by the teacher. Teachers from different districts can also exchange good specimens among themselves, at association meetings, and use the specimens thus secured to show their pupils “what other people are doing.”

The county superintendent should secure the best material from each school in his county, and have it properly displayed at the county institute or some other gathering of teachers and patrons. The best from each county should be shown at the state educational meeting, and the best from the rural schools of each state should find its way to the national meeting, and help to constitute a distinctively “Rural School Exhibit.” If pupils and teachers can look forward to such a possibility as the outcome of their daily work, that work will surely be better done, and opportunities will be sought for enlarging its scope. The value of such exhibits is set forth in a series of articles in the *Educational Review*, Vol. 5.

Exposition Forms.—Although the teacher who is really in earnest about making a success of his exposition will do so with any kind of raw material, yet it is very desirable to have map blanks, paper, etc., uniform, not only throughout the individual school, but all over the county. The less attention is diverted from the work by the varia-

tions of the paper on which it is done, the better can a just comparison between different pupils and different schools be made. Paper used for written work should have printed headings, and these, when filled out, should show plainly the facts that any careful student of the work of schools wants to know. Below is given a suggestive heading for papers on which written work is to be done. The size of the sheet should be foolscap.

CARROLL SCHOOL

District No. 8.	Clinton Co.,	Penn.
Teacher.....		
—————○—————		
Grade....	Branch.....	Subject.....
		Pupil.....
		Age....
	Date.....	

Every piece of work should, without exception, show at least the *grade* and *age* of the pupil.¹

Time and Place of Exposition.—The exposition should mark the close of school, and should take place at the schoolhouse. Suggestions for a detailed program are given under the topic "Closing the School," on p. 79.

The foregoing topics, belonging to a discussion of the general management of the school, leave still some other suggestions to be made in detail. These will fall under the heads "Management in the Room" and "Management on the Playground."

Management in the Room

The chief problem, many teachers think the only problem, which confronts the teacher in the schoolroom is that of maintaining good order. Good order in the room is that condition of things under which each pupil does good work without interfering with anybody else. This

¹ See Holbrook's "New Method."

condition is modified by either physical or mental influences, or both.

Physical Causes of Disorder.—Disorder is often occasioned by untoward physical conditions, over some of which the pupils can have no control, and the teacher, unfortunately, often but little. The gravest of these are crowded or otherwise uncomfortable seats, poor ventilation, too high or too low temperature, the presence of the stove in the middle of the room (idle pupils love to hide behind a stove), unshaded windows, slamming shutters and rattling sashes, creaking doors, and the presence of the water bucket in the room. The mere enumeration indicates the remedies.

Pupils Must Be Comfortable.—The whole question of order or disorder arising from physical conditions can be easily solved by the formula: *Pupils must be made comfortable.* The teacher who knows the value of little comforts and the cumulative force of small annoyances will see to it that an even temperature is maintained, that seats and desks are at the right height, that floors are swept and furniture dusted daily, that sunny windows are screened, that rusty hinges are oiled, in short, that everything which annoys the eye or ear or muscle, or furnishes a temptation to idleness or unnecessary movement, is removed or reduced to a minimum.

Disorder also arises from psychic causes and is most frequently due to the personality and manner of the teacher, to his harsh and uncultured voice, to his lack of self-control, to his deficient scholarship, to the lack of a good daily program, and, above all, to the teacher's failure so to vary the routine of the school as *to awaken and sustain a healthy interest.*

The Teacher's Personality.—In any discussion of

ways and means in education one truth persistently thrusts itself upon us, and that is that successful management and fruitful method depend, at last, more upon the *teacher's personality* than upon all other things put together. This personality impresses itself upon the pupils through the teacher's eye and bearing, tone and gesture, even through his garb; and back of all is that which is called "personal magnetism," that intangible, indefinable something whose existence is very real and makes itself very consciously felt.

The controlling and inspiring force of a clear, penetrating eye, a calm, modulated voice, a self-controlled manner, an air of reserve force, can not be measured, but these count for more than all the birch rods or loud ordering about. It is this fact more than any other that makes whatever value there is in the familiar assertion that the teacher is born, and not made by normal schools or pedagogical lectures.

The Teacher's Scholarship.—Sound scholarship (*sound* scholarship, not necessarily *extensive* scholarship) very largely increases the teacher's personal force. Pupils who themselves care but little for learning respect it in the teacher, when it is, so far as it goes, sound and accurate. Scholarship inspires confidence. The teacher must know thoroughly what he assumes to know, or the pupils will soon come to scorn him as a pretender; then good government is at an end.

To scholarship in the strict sense should be added as much *general information* as the teacher can acquire. He must meet each class full of his subject and competent to give many illustrations and explanations not found in the text-books. The test of a teacher's minimum sufficiency of knowledge is his ability *to dispense with a book* while

conducting a recitation; not otherwise can he inspire, refresh, interest, and guide his pupils.¹

The Daily Program.—The best preventive against disorder is a strict adherence to the principle of “definite work for each one to do at a definite time, and each one doing it at that time.” This means, of course, a carefully planned and closely followed daily program, which provides both for times of recitation and for times and character of other work. A good program calls not only for study, but for the study of certain things at certain times.

Fatigue.—The first principle that should govern the making of a daily program is:

The school day should be so divided between study, recitation, and play that fatigue shall be reduced to a minimum, and efficiency be brought to its highest level.

The question of fatigue, which is of such prime importance in arranging periods of study and recitation, alternated with periods of recitation and play, is only beginning to receive proper notice in this country. Just how long interested attention may be given by children at different ages, how much application can be required without injury, how long the periods of rest and play should be—these are matters still awaiting accurate determination through careful inductive investigation. The whole question is of far less moment in rural schools than in city schools. In the country, children are under less restraint, have almost unlimited facilities for outdoor exercise, and therefore suffer less from any form of school fatigue than is the case in cities. A fuller discussion of the subject, therefore, than is needed here will be found under the head of the “Administration of the Individual City School.”

¹ For further discussion of lesson management see Roark's “Method in Education,” p. 67, Rule II.

Each teacher must make an intelligent study of his own school as a whole, and of individual pupils, and base his daily program upon the results of this study.

In any event, a program should be a *living* one, and not cast-iron. Only three rules can be laid down with any positiveness. The first is, *the studies and exercises which make the severest tax upon the powers of concentrated attention and abstract thinking should come in the earlier morning*. Because the younger pupils are able to do but little except immediately under the teacher's direction, and are sure to be aimlessly restless if not given interesting employment as soon as school assembles, they should be heard in recitation first, after the opening exercises, and should then be assigned to seat work or outdoor activities. During the time occupied in recitation by these elementary classes the most advanced pupils should be reviewing the difficult work prepared the night before, and should then be called to recite. The time between the opening of school and the first general recess should be mainly occupied by the recitations of the advanced grades in arithmetic, technical grammar, and history. The lighter work and the culture subjects should come mainly in the afternoon.

A second law of the program may be stated mathematically — weariness *is inversely as the square, or even the cube, of interest*. German writers have made a very clear distinction between *fatigue*, which is a pathological condition, mainly physical, and *weariness*, which is psychological and is due mainly to lack of interest.

A third rule is, *there should be frequent rest periods*.

In the rural schools, where the school day is a long one, there should be two long recesses, fifteen to twenty minutes each, one to break the morning session, the other the

afternoon, and the noon intermission should be at least an hour and a quarter, preferably an hour and a half, in length.

The pupils of the first division, the first three grades, should have an outdoor recess also between the first general recess and noon, and would profit by a short one between the time of opening and the first general recess. If local conditions admit of it, which frequently they do not, this division should be dismissed for the day at the mid-afternoon recess, if not earlier.

Suggestive Daily Program.—In the following partial program the effort is made to put into practical working form what has been said in the preceding paragraphs. The first and last sessions of the day are given in detail. The second and third sessions should follow the same general plan, the most difficult work of the afternoon coming first.

Study at School.—There are several excellent reasons why most of the studying should be done at school. In the first place, if the lessons are prepared at home the pupils will be idle at least two thirds of the time at school, as no grade will spend more than one third of the school day in recitation. Again, it is quite as much the business of the teacher to show his pupils how to study as it is to conduct recitations, and this requires the preparation of lessons at school. Finally, if pupils work as they should while at school it is hygienically wrong to require work of them at home. An excellent rule is, *Require no home study of pupils below the sixth grade.*

Work of All Grades Indicated in the Program.—The program given opposite indicates work for each grade, but as a matter of fact the cases are very rare in which any rural school will have all grades going at once. When

Tentative Daily Program

Study by Divisions.				
From	to	Mins. used	Exercises	I. II. III.
8:15	8:30	15	Opening Ex.	
8:30	8:35	5	Grade 1 reading.	
8:35	8:40	5	First Reader.	
8:40	8:50	10	Sec. Reader.	
8:50	9:15	25	Gr. 7 Arith.	
9:15	9:40	25	Gr. 8 Arith.	
9:40	9:50	10	Third Reader.	
9:50	10:05	15	Fourth Reader.	
10:05	10:25	20	Gr. 6 Arith.	
10:25	10:45	20	Gen'l. Recess.	
(Only Daily Sessions 1 and 4 are Given.)				
2:40	2:50	10	Oral lessons for Divis. 1.	
2:50	3:00	10	First Reader.	
3:00	3:20	20	Gr. 7 Geog.	
3:20	3:30	10	Singing for Divis. 2 and 3.	
3:30	3:45	15	Gr. 8 Lit.	
3:45	4:00	15	Gr. 8 Civics.	
4:00	4:10	10	Oral spelling, Divis. 2 and 3.	
4:10	4:15	5	Dismiss.	
			Dismissal, or con- structive occupa- tions.	
			Prepare lan. work.	
			Sloyd, or draw.	
			Prepare physi- ology.	
			Sloyd, or draw.	

it so happens that classes in all or a large number of the eight grades must be organized, the teacher is compelled to use several expedients in order to save time and do effective work with each class.

Group Work.— In the first place many exercises of the school may be participated in at the same time by the grades of a group or division, and some exercises by the school as a whole.

Drawing, penmanship, manual training (seat work or sloyd), and calisthenics may occupy the whole school, or a large part of it, at the same time.

The nature-study exercises may better be by divisions than by grades; so may also the vocal music, the language work, the reading or literature of the third division at least, and the forensic drills.

Some excellent authorities upon school management have even advocated conducting all the work of the rural school in a three-group, or, at most, a four-group arrangement. Programs according to this plan are given in the Report of the Committee of Twelve and in White's "School Management." No plan of grouping is really economical, however, if it necessitates throwing together into one class two or more grades in subjects in which there is a necessary sequence of topics, as in arithmetic and history, for example.

Alternation.— Under stress of numbers and lack of time a teacher is justified in alternating some of the classes in the third division, for example, holding recitations in arithmetic on Mondays, Wednesdays, and Fridays, and in technical grammar, or composition, on Tuesdays and Thursdays. It has been suggested that the alternation be by *years*, so that all the pupils who first enter school in the odd years shall, beginning with the third grade, take the

work from there on by alternate years. Under this arrangement pupils who entered school in 1901 would take the work of the third grade after that of the fourth, the fifth after the sixth, the seventh after the eighth, and so would finish the course from the seventh grade. This plan is given in detail in the April, 1901, issue of *The County Superintendent's Monthly* (Fremont, Neb.).

The objections that obtain against this plan are, however, precisely the same as those against conducting all classes under the three-group arrangement; and in addition to these objections is the fact that to alternate by years would require a more careful keeping of the school register than the average teacher can be induced to do.

The Lancaster Plan.—The Bell-Lancaster,¹ or Monitorial, plan, although it has never fulfilled the promises made for it at the time of its introduction into practical school management, is altogether the best arrangement for an economical administration of the daily program in a crowded rural school where but one salaried teacher can be employed. This plan provides for putting the best pupils of the advanced grades in charge of some of the work of the lowest division, and where this is done under the careful supervision of the teacher the results are excellent. An older student is often much nearer, psychologically, to the younger pupils than the teacher is, and can therefore appreciate and relieve the younger pupils' difficulties. There is less of formalism and constraint between the older and younger pupils than between the children and the teacher, and the little people can, therefore, often profit more by the instruction of older pupils than by the teacher's. The pupils who render

¹ Report of the Nat. Commissioner of Ed., '94-5, 1: 403; 2: 1153.

assistance under this arrangement are greatly benefited, because to teach a subject in even an elementary way requires a far better assimilation of it than is needed in order to recite successfully. Then, too, the recognition of scholarship and trustworthiness which selection as an assistant gives is justly regarded by the pupil as an honor, and the effect upon his self-respect and character is always good. It has often happened that bright boys and girls whose time was not fully occupied with their own work have been saved from becoming disturbers of good order by being selected as helpers and thus made responsible in a sort of official way for the right conduct of the school.

The teacher should be very careful in his selection of helpers, and should exercise a close oversight of their work. He should meet them frequently, after or before school hours, and go over the lessons with them, giving them kindly counsel and direction, and in doing so will discover that he is himself benefited professionally by the effort to teach others how to teach.

Extra Branches.—Another question affecting the proper adjustment of the daily program is that of extra branches, which are sometimes called for by older pupils. Shall the teacher give instruction in any subjects not called for by the common school law? The answer should be yes, with one proviso, and that is the teaching of extra branches shall never encroach upon the time needed for the required subjects. If there are a few pupils sufficiently advanced to undertake the study of two or three branches outside the common-school list the teacher should do all he can to encourage them in doing higher work. He himself will reap great benefit from such work; but the greater reward will be the satisfaction of having set young feet in the way of higher learning.

Individual Work.—Some years ago there was discussion of what was known as the “Pueblo plan” of individual work,¹ as opposed to class work. All that is of any value in the “plan” can be secured for the rural school by the teacher’s using an hour not oftener than once a week in which, the regular recitations being suspended, to go about the room from pupil to pupil in order to give individual help, and to show pupils *how to study*. The day on which this individual help is given should be movable, so the pupils may not come to look for this feature at a certain time. When time presses unusually, this individual help may be given outside of school hours.

Calling and Dismissing by Signals.—Orderly precision of movement about the room and between the room and playground is not a matter of necessity in the country school as in the city school, but its value is so great that the rural school should take full advantage of it. To march to and from class and to and from play at definite signals is a splendid drill in orderly, expeditious movement, and aids greatly in forming and fixing the *habit* of maintaining good order at all times. The pupils soon come to like the marching and thus their interest in the school is increased. And in addition to these advantages it saves time.

All signals within the room should be given quietly. The call to recitation and dismissal therefrom may be made by the low counting of “one—two—three,” or by simple movements of the head or hand. The first signal means “position in seat,” with material in hand and feet in the aisle; the second means “rise and pass,” and the third “sit.” When dismissing the school for recess or to go home, “position in

¹ Educational Review, 7: 154; 8: 84.

the seat " means to come to attention, each one sitting squarely in the seat and looking at the teacher. Then the teacher gives directions and advice about the play and conduct on the playgrounds, or sums up the day's work in a few words of commendation or of regret for a day not quite up to the standard.

Management on the Playground

The "Play Line."—It is well to have an imaginary line about fifteen feet from the door, and require all pupils *to walk* quietly between that line and the door, whether coming in or going out. This simple little requirement prevents crowding and fussing about the door, and strengthens the habit of order in the house.

The Teacher on the Playground.—As a rule the teacher should be on the playground whenever the pupils are: first, so that he himself may get needed exercise in the open air; second, that he may discharge duties no less binding than those which claim his attention within doors. He should direct the pupils' activities and look after the order as carefully as in the schoolroom.

The matters that need most careful watching at "play-time" are (1) quarrels, (2) dangerous play, (3) trespassing.

Since the pupils, when on the playground, are somewhat less under the immediate control of the teacher than when within the room, order must be provided for there even more than in the house, by a careful and patient working out of the truth that real government after all can come only *from within*. Control, to be effective in the long run, must be *self-control*.

Quarrelling.—Nothing will effectively prevent quarrels and even fights upon the playground, except constant

alertness on the part of the teacher, who must be able to scent a coming quarrel almost before it has begun to brew, and a long and patient inculcation of the old, sound truth that it is usually more cowardly to fight than to refuse to do so. Again and again must it be remembered that the only real control is self-control, that "He that is slow to anger is better than the mighty, and he that ruleth his spirit than he that taketh a city." If the "fight" should prove to be more than an angry scuffle, the belligerents may be sent promptly home, may be subjected to corporal punishment, or even, in extreme cases and when the boys are nearly grown, turned over to the local peace officers. It will, however, usually prove quite sufficient to separate the truculent pair, make them appear ridiculous to the others, and, later, give each an earnest, straightforward talk.

Dangerous Play.—When a number of healthy, active children play together they will surely hit upon some unsafe sports. Here again it is impossible to lay down any but general rules for the solution of the teacher's problems. A safe rule is, "Allow no sports that call for mere strength or weight alone;" and conversely, "Encourage games that involve skill as well as strength." Games requiring only strength are unsafe, and unfair to the weaker, as well as tending to cultivate an admiration for mere brute muscle. Games of skill may be successfully played by the weaker pupils, and they cultivate quickness of mind.

The teacher should not only know all the local games and sports, but be able to suggest good new ones and to show the pupils how to play them. It is as much the teacher's business to know the games played on a country school playground as to know the multiplication table.

Trespassing.—School children's trespassing upon gardens or orchards furnishes the teacher occasion for especially reënforcing his teaching of civic duty. Here, again, the true control must come from within the pupil, and springs, in this case, from a cordial acceptance of the principle that our *privileges* end where the *rights* of others begin; that no one has excuse for interfering with the personal or property rights of another. No other principle of civic conduct needs so careful inculcation as this one. Boys must be made to understand and *feel* that it is not "fun," but simple stealing, to raid orchards, or gardens, or hen's nests, even though but little is taken and little damage done. They must be taught that it is not "sport," but merely vulgar hoodlumism and selfish meanness to throw stones or snowballs at people passing along the highway. They must be brought to a realization of the essential lack of *patriotism*, of real loyalty to the school and to the principles of American government, in all such misdeeds.

Coeducation on the Playground.—In the rural schools coeducation of boys and girls is an established, wholesome fact. The conscious, deliberate separation of the sexes in any grade of school is unhealthful and therefore unwise, and it is well that conditions prevent the attempt in the elementary schools. This coeducation should extend to the playground, where the most valuable amenities of social life may be taught and illustrated through the normal intermingling of boys and girls. In the first place, the school yard, be it large or small—or if there is no inclosed yard, then whatever area is allotted for play—should be marked off into three sections, one of which, all should clearly understand, is for the use of girls exclusively, the opposite one for boys exclusively,

and the middle one for both. The matter of playing together will then regulate itself. If either boys or girls desire to play to themselves, they do so within their own section; if they desire to play together they do so within the section common to both. This is the only regulation needed, unless there be special local reasons for additional rules. The teacher, being present on the playground throughout each intermission, should sympathetically so direct the intermingling of boys and girls as to train them in the little courtesies due from each sex to the other, and thereby secure to them one of the important values of coeducation.

The polite conventions should also be observed, not only between boys and girls, but between members of the same sex also, during the eating of lunch at the noon hour. Attempts to carry out this suggestion will be beset by many difficulties, chief of which will be the anxiety of every child to dispose of lunch as soon as possible in order to get to playing. But if the teacher can even occasionally get all the pupils to sit down quietly, at the same time, in family or neighborhood groups, and eat their lunch hygienically and *humanly*, with observance of table courtesies, it will be very helpfully educative.

The Teacher at Play.—The question as to how much, if at all, the teacher should take part in the games of the children upon the playground must be answered in each case according to local conditions. The teacher should at all times be ready to teach a new game, if interest in the old games flags, and to introduce acceptable variations into those that are familiar; and to do so necessitates some participation in the children's play. At other times it is safest, as a rule, for the teacher to watch, with sympathetic appreciation, the sports of the playground, but

rarely to take part in them. It is too difficult equitably to participate as a player, and at the same time to exercise over all the authoritative supervision of the teacher.

Two particular suggestions have been found of value in the case of the man teacher: (1) he should not take part in games of strength and skill, with the larger boys, unless he is sure of being victor at least three times out of five; (2) he should not act as umpire in any hotly contested game, unless at the urgent and unanimous request of all the players.

(e) Closing the School

Throughout the whole term of school the teacher must keep steadily in view not only the present good of the pupils, but their future growth also; not only his duties to the schools but his wider duty to bring the whole community to a growing appreciation of the work and worth of the public school.

The closing weeks and days of school should, therefore, be made to show richer and more convincing results than any others; the work should grow increasingly difficult and yet be more successfully and promptly done than earlier in the year. There should be none of the flabby "letting down" of effort which is too often seen in schools near the close of the term, while teachers and pupils both count the days till "school is out." The last weeks afford the best opportunity for training the pupils in persistent work, and the requirements should not grow slack, although the work may be given more variety.

The especial aims of the closing week should be the intensifying and fixing of past results, the persistent stimulation of interest in the pupils and the community, and the preparation for a culmination of effort at the

close of school. The children will, of course, carry home news of all that is going forward in the school, and in direct proportion as they are interested the parents will be. Formal announcement of the closing exercises should be made to the school several days before they occur; and the local paper, if there be one, should be asked to repeat and strengthen the invitation to the public to attend these exercises. The teacher will wisely seize every good opportunity to extend a personal invitation to his patrons, and even the pulpit may serve as a medium of directing attention to the work of the last days of the school; any minister would be glad to coöperate in a work so similar in purpose to his own.

The Exposition.— On p. 58 the suggestion was made that the exposition, which is a display of the genuine results of pupils' regular work throughout the term, may be both the modern exposition and, in part, the old "exhibition" also. The exposition proper, for which written work, maps, drawings, nature-study collections, etc., have been prepared, should be held in the forenoon of the last day, and all the exhibits should be got in place the day preceding. The heavier material should be placed neatly on desks and tables, so that each pupil's work will be by itself, and will be presented to observation *in the order of its preparation*, that is, each pupil's exhibit should show first the work first collected from that pupil, and so on through to the last. In no other way can a correct estimate of each pupil's progress or lack of improvement be so readily reached.

The lighter material, especially maps, drawings, and mounted specimens of plants and flowers, should be strung on tape or strong cord and placed around the room on the walls.

Some days previous to the exposition, several of the more advanced boys and girls should be appointed to act as ushers, and should be drilled carefully in their duties of conducting the public through the room, and of explaining clearly the nature and purpose of the work on display. General directions must also be given beforehand to the school as a whole, and each pupil not an usher should be near the exhibit of his own work, ready to answer any question about it.

The value of such a display, carefully inspected by a public which may be at first indifferent or adversely critical is evident to anyone, but can be fully appreciated only by those who have tried the plan here outlined and have seen the crowd of visitors become interested and then enthusiastic.

Good results will be all the more marked and permanent if it can be arranged beforehand to make the occasion a neighborhood holiday, and have a "basket dinner" served on the grounds. After dinner the exposition material can be packed away, the best exhibits being reserved by the teacher to be put on display later at the County Institute, and the room made ready for the final exercises, which may be held either in the afternoon or at night, according to circumstances.

The Exhibition and Commencement.—The final program should consist of the "exhibition" feature of the exercises, which, while more attractive to most of the community than the exposition, can, at the same time, be made quite as truly an exhibit of the pupils' work along certain very important lines. Every grade should be represented upon the program, but the prominent share will belong to the pupils who have finished the course of study and who are, therefore, celebrating their first

commencement. Even in states which do not provide by law, as nearly all do, for graduation from the common-school course, this commencement feature can be made prominent; and it should be, so long as the idea is kept well to the fore that the work done is simply preparatory to higher and better work in some advanced school. If possible, some man or woman of scholarship and experience, who can speak briefly and pointedly, should be secured to close the program, and so to close it that everyone present shall be filled freshly with inspiration, and aspiration to be and to do.

Suggestive Program for the Last Day.—In order to summarize the preceding paragraphs, and present their substance in concrete form, the following program is suggested for the exercises of the last day. It can be adapted to the needs and conditions of any school

10:00 A. M.—*The Exposition of the Term's Work.*

Ten minutes' address by the teacher, stating the purpose and character of the Exposition, and welcoming the public.

Inspection of the various exhibits, under the direction of the teacher, ushers, and other pupils, until noon.

12:00 M.—*A "Basket Dinner,"* outdoors if the weather permits.

This should be made a social feature.

After dinner, the schoolroom is cleared for the afternoon exercises.

2:30 P. M.—*The Graduation Exercises.*

Music.

Invocation.

Music.

Brief description of the term's work, by the teacher.

Relation: "The Spanish-American War."

Essay: "Within the Walls of Pekin."

Music.

Recitation: Selection from "Widderin's Race"
(Hayne).

Oration: Finer than Gold.

A Dialogue.¹

Music.

Debate: "Is it necessary for civilized nations to
make war upon one another?"

Music.

Delivery of certificates or diplomas.

Dismissal.

(2) THE CITY SCHOOL

All the fundamental principles underlying the economical organization and administration of the individual school in the country are valid also in the case of the individual school in the city. Their application needs but slight modification to suit the different environment. Only such modification will, therefore, be discussed in detail in the pages immediately following.

A. EQUIPMENT

(a) Grounds and Buildings²

The Site.—The paramount considerations that should govern the selection of a site are the health, comfort, and convenience of the pupils. In cities, each school building should be so placed as to stand at least a block away from street-car lines and streets on which there is heavy traffic, and the streets and alleys in the immediate neighborhood of the buildings should be paved with asphalt. City authorities are hardly beginning, yet, to act upon the

¹ Write to F. A. Owens Publishing Co., Dansville, N. Y., for dialogue books.

² Refer to "School Sanitation and Decoration," Burrage & Bailey; "School Hygiene," Shaw; Report of the National Commissioner of Education, '93-4, 2: 1301; Proceedings of Nat. Ed. Association, '97, 996; "The Sanitary Conditions for School Houses," U. S. Bureau of Ed. Circ. No. 3, 1891; "Essentials of School Architecture," Bruce; The Outlook, 72: 218.

knowledge that all uncouth noises waste nerve energy. The building should also be out of reach of the smoke and smells of factories; and great care must be taken to have the neighborhood free from the moral contamination of saloons, tobacco shops, and disorderly houses. The young are so susceptible to the influence of environment that, so far as society is responsible, there should be nothing with which they come in contact while in school that can offend or corrupt either physical or moral sense. The Board of Education or the City Council should have power, under the city charter, to prohibit the establishment of any distracting or contaminating industry within two blocks of a school building.

More Space Needed.—It is entirely safe to say that there is not a public school in any city of the United States which has so large a plot of ground as it should have. Poverty in land varies from a small strip around the building to not so much as a square inch outside the site actually occupied. Even in building a prison many cities are more mindful of the health and comfort of the future inmates, and provide more air space and sun space, than for the schools. Each pupil should have, on the playground, at least five times as much room as he has floor space in the school building, and although this is over twice as much as is suggested by some authorities it is little enough. In any case, the grounds should be large enough to prevent the nearest buildings from interfering with the supply of light in the class rooms. In every city the school authorities should have power to condemn real estate for school purposes; it is no less important, surely, that the community should have right of eminent domain in the grave matter of school sites than in the case of streets or railways.

Ornamentation of Grounds.—In ornamenting city school grounds a compromise must be made between the need of free play and need of æsthetic environment. Such a compromise may be effected by grouping trees and shrubbery, leaving open areas for play. Opportunity for spontaneous exercise is more important than ornamentation, but still no school yard need be wholly barren of grass and trees.

The Building.—City school buildings are now planned from within out; the needs of the school are provided for, and the exterior architecture is made to fit these. Not so long ago it was the other way. The needs that are vital to the school and that the architect must adequately provide for are few, but imperative. Whatever the building lacks it must not lack these: spacious rooms and corridors, with ample facilities for both natural and artificial lighting, a sufficient number of wide exits to empty the house safely and quickly, adequate heating and ventilating apparatus, an *assembly hall*, sufficient toilet accommodations, and an “emergency room.” Other features are more or less needful, but these are indispensable to true economy.

No building should be erected to house more than twelve hundred pupils, because more than that number can not be economically provided for under one roof either in supervision and teaching care, or in material comfort and safety. Neither should any building have more than two stories above the ground level, for reasons of safety and comfort.

Corridors and Exits.—Hallways should be at least fifteen feet wide, and they had better be twenty; the doors leading into them from the several rooms should swing outward and toward the nearest stairway. There must

be in the corridors no obstruction of any sort; the way to the exits must be clear. The files of pupils, passing in and out, should not have to make a sharp turn to get into or away from a stairway. The stairways should be guarded by very strong and high balustrades, and should have two hand rails on each side, one lower than the other, so that pupils of different sizes may have the help and protection afforded by a good handhold. The doors at the exits must open *outward*; this is, in some states, required by law.

Heating and Ventilating.—There are several good systems for heating and ventilating city school buildings. The details must be committed to the care of an expert architect, who should be held to the absolute requirement to supply warm, *clean* air to the whole building in such quantities as to ensure a complete change about every five or six minutes.

Cloak Closets.—The cloak closets should meet the requirements of accessibility, cleanliness, and dryness. They must be so arranged that wraps, umbrellas, and overshoes will dry quickly and without giving off dampness or odor into the air of the hallways or rooms. These details, also, can be provided for only by the expert school architect.

The Assembly Hall.—Every school building should have a well-lighted, comfortably chaired assembly hall, with seating capacity somewhat greater than the enrollment of pupils. The value of such a hall is now recognized by all practical principals, and by most school boards. It is a prime factor in the successful correlation of school and community and is indispensable to the best work within the school itself.

Communicating Rooms.—It will often be convenient

and a means of saving time, if two or more rooms are so built that they can be thrown into one. There are many exercises in which a hundred or more pupils of the same grade can take part together, although for regular class work they should be divided into two or more groups in separate rooms.

Toilet Rooms.—Provision must be made not merely for water closets but for toilet rooms, with mirrors, lavatories, and a good supply of soap and towels.

In an increasing number of cities facilities for bathing are being put into school buildings, and if these are used under proper regulations the results are excellent.

The conditions that are imperatively requisite in the toilet rooms are (1) abundance of light, (2) privacy, (3) cleanliness, (4) automatic flushing, (5) perfect sanitary plumbing, including separate ventilation through high stacks.

Library.—There is great need in each school building of a room specially fitted up for use as a library and reading room. No matter how small the collection of books may be they should be carefully indexed by subjects, on the card plan, and pupils should be trained both in ready use of the card index and in the handling of the books as tools to work with.

The "Emergency Room."—There should be on each floor of the school building a room equipped with a lounge or cot, an easy chair or two, and simple medicines and other provisions for help in cases of sudden illness or accidents of any sort. Such a room would add greatly to the comfort and safety of the weak and suffering among the pupils, and to the peace of mind of principal and teachers.

The foregoing discussion of the building has pur-

posely been made brief, because the public mind is to-day so awakened upon the subject that school boards are held closely to their duty in the erection of buildings. In every case, when the erection of a new building is about to be undertaken, the school board should consult with the superintendent and principals, and their suggestions upon the practical working needs of the school should be carefully embodied in the architect's plans. It only remains to add that architectural harmony and proper decoration within and without are so important as almost to be classed as essentials.¹

An architecture of simple dignity and beauty, hallways and rooms decorated with copies of classic statuary and of the world's best pictures, have an educative influence all the more powerful because their effect is largely subconscious.

Drinking Facilities.—Decency and health require that each pupil shall have his own drinking cup, and that water should be taken from the bucket or jar through a faucet, not by dipping the drinking cups in.

(b) Furniture and Apparatus

The furniture of a city school need not be different in any respect, upon pedagogical grounds, from that of the rural school. There is the same need in the one school as in the other for the single, adjustable desk and seat, for the same sort of blackboards, for bookcases and tables, and means of water supply.²

¹ "School Sanitation and Decoration," p. 94 *et seq.*; "Recent School Architecture," issued by Supt. Public Inst., Albany, New York; "Decorating School Rooms," Report of Nat. Commissioner of Education, '95-6, 2: 1363; Twenty-second Report of State Supt. of Ills., p. CXVII; "Sanitary Conditions for School Houses," Circ. No. 173, Bureau of Education, Washington.

² Shaw's "School Hygiene," p. 116; Kotelmann's "School Hygiene" (Bardeen, Syracuse, N. Y.); Educational Review, 18: 9; Report of Nat. Commissioner of Ed., '98-9, 1: 611.

The apparatus needed by the city school differs from that required in the country school of similar grade only in the nature-study work. In the city, facilities are needed in the way of museums and window gardens that in the country are unnecessary because of the abundance of nature-study material all about the rural school.

Of course, when abundant apparatus can be afforded, better teaching can be done (by no means necessarily *will* be done) with it than without it. But it is well to remember that if the pupil is too richly supplied with apparatus he is apt to grow into the conviction that good work can not be done without it, whereas, often, the best work is done in a laboratory whose equipment is less than good, but is well supplemented by the ingenuity and contrivance of the student.

It is so common now to find even in buildings not otherwise fully equipped, such conveniences as automatic program regulators, and telephone connections between the office and the several rooms that it is not needful to enter here into any detail with regard to these things. They are not absolutely necessary and are not without objections, but are very helpful in directing the routine of work.

B. ORGANIZATION AND ADMINISTRATION.

(a) Beginning the Session

A Preliminary Meeting.—The principal should meet his teachers, all of them together, a few days before the opening of the school. The objects of this meeting are (1) to give directions regarding the coming work; and (2) to inspire each teacher afresh with zeal to be and to do for the sake of the children. The teachers must be brought to feel that the work which they are about to

resume is full of privilege and joy; that whatever of vigor and mental riches and spiritual uplift they have acquired during the past year and the closing vacation is capital that owes large dividends to the pupils.

The First Day of School.—Each teacher should have a clear and detailed plan of the first day's work in mind before entering her room. This plan must provide for the following essentials: The sincere welcoming of each pupil, the recognition of each one's individuality; a friendly, general chat about the way the summer was spent; clear and explicit information and directions as to the books and other supplies to be newly purchased; a brief, crisp review of some fundamentals in last year's work; and, lastly, the *assigning of some lessons to be recited the next day*. Each pupil should go away with the feeling, at the close of the first day, that it is better to be in school than out, and that he and the teacher are going to be good friends.

The teacher can not be too careful and explicit in directing the pupils regarding the new books and supplies needed. A safe plan is to give to each a printed list with the things required plainly marked.

The crust of forgetfulness that has formed over much of what was learned last year should be broken by a brief, judicious review of the salient points in the subject-matter covered by last year's work. Such a review, informal and sympathetic, is admirably adapted to show the pupil his needs and to swing the mind into the path of study again. It will, too, reveal much to the teacher.

The custom which has so long prevailed, of beginning real work only in the second week, is to be unqualifiedly condemned. The pupils have, at the opening of school the enthusiasm born of change from the summer's idle-

ness (or of the interests kindled by the vacation schools) and this enthusiasm must be yoked to active work immediately. No precious days or hours should be lost in getting ready to begin.

(b) Conducting the School

Any school must, in order to do good work, be more than a mere aggregation of unit pupils or unit groups; it must be a living organism, its parts coöperating for a common purpose, the whole pervaded and animated by the same spirit. Such conditions it is the function of the principal to bring about. His business is to create the distinctive atmosphere of the school, to have a clear and definite educational policy and to bring each teacher into a sympathetic and appreciative understanding of it. He must arouse within each the spirit of coöperation and mutual helpfulness, and a profound sense of responsibility, without which nothing permanent can be done.

The Principal's Equipment.—The principal must know his building from basement to roof; his visits of inspection must be frequent and effective. He must know his teachers, their personal and professional worth. He must know at sight and, if possible, by name every pupil in his school, and ought to be somewhat acquainted with their home environment and their capacity and inclination or disinclination for work. He must know the system of which his school is a part. These things he must *know* almost automatically, as the immediate tools of his work; the more he can have besides of knowledge and culture the better principal will he be.

The principal comes into professional contact with his teachers in two ways, through teachers' meetings and by inspecting class work.

Teachers' Meetings.—A principal should meet all his teachers together not oftener than once a month, and the time should fall just after the principals' meeting, so that whatever of inspiration and enthusiasm marked that meeting may be carried at once with freshness and zest into the conference of teachers in the individual school.

Objects.—Teachers' meetings should be held mainly to get the helping touch of professional comradeship. To secure it there must be some basis of serious work. This basis will necessarily be determined by local and immediate needs. There is fine suggestiveness in the following sentences from the letter of a practical principal: "There is a great and constantly growing mass of interesting and profitable material with which teachers are not acquainted. There is a knowledge of the purposes and functions of school life of which they have a very dim conception; there are theories and methods of presentation which they neither understand nor appreciate. There is a vivifying life principle about school work which is the soul of the school, which is entirely absent from many rooms. I have found it helpful to present any exercise which would tend to raise the standard of our teachers in any of these directions. The principal's best work is, I believe, that which inspires his teachers to become students, for a teacher student is usually an excellent student teacher. Such work is needed as will kindle and keep alive a fine professional spirit. The great danger is that teachers will become self-satisfied, drop into a routine way of doing things, and cease to make professional progress. High and constantly advancing ideals must be held before them. There must be a constant inquiry into the philosophy and success of methods used."

Although the work of any meeting may be quite varied, the whole series of meetings must carry through the year some *central core* of reading, thought, and investigation. To plan such work wisely is one of the most important duties of a principal.

The Principal's Inspection.—The results of a visit of inspection should be (1) increased confidence of the teacher in the principal as a gentleman and as a supervisor, (2) quickened willingness of the pupils and teacher to work harder, (3) the noting by the principal of points in the teacher's work, for commendation or criticism.

The principal should have no cut-and-dried formula of inspection. One time he may simply sit quietly for a while, and withdraw, after a pleasant word of greeting to teacher and pupils; another time he may make a short, cheery talk to the pupils; and at another he may "take the room" and teach through one or two periods. Upon this last point it may be further said that the principal should teach in the presence of the teacher both to give her a good example and to disarm her criticism that he "is always ready to *tell* how, but avoids *showing* how." But such teaching should never be done with the air of depreciating the teacher's work; rather should it be done as if it were a privilege and a pleasure the principal had asked to be permitted to enjoy. Under no circumstances should a teacher be criticised in the presence of the pupils, either openly or by implication.

Teachers' Visitings.—A plan well approved by principals who have tried it, is to have a teacher whose work is weak at some point visit the class room of another teacher especially skillful in that particular. More can be gained, often, from such a visit than from much talking and directing by the principal.

The Principal in the Office.—A principal need spend only a comparatively small part of his working day in his office; and when there he should be much more than a mere clerk and tabulator of statistics.

His office hours, which must be fixed and closely observed, should be known to the patrons of his school. Any parent, teacher, or pupil who has a legitimate cause for seeing the principal should be given a cordial and careful hearing during office hours.

The Principal as Teacher.—The principal should exercise other functions than those of a clerk, an inspector, or an executive. Just as the teacher of chemistry has his own laboratory where he keeps himself in fresh and close contact with the problems of his science, so the school principal should have his own laboratory of pedagogy in which to test for himself such theories of teaching as seem to him deserving of a trial. He should teach at least one class regularly. This class need not be from the higher grades necessarily. Many a primary teacher would be saved the worry of trying some method wholly condemned by her experience, if the principal would only try it himself before forcing it into the primary rooms. No good reason can be assigned why a principal should not teach a class each term.

Opening Exercises.—Everything suggested for the rural school, regarding opening exercises,¹ is even more strongly to be urged in the case of the city school. If there is an auditorium in the building large enough to seat all the pupils — and there ought to be — the whole school should be assembled at least twice weekly for general exercises at the beginning of the school day. All but the two or three lowest grades could, with profit,

¹ See pp. 49-51.

come together daily. The programs for these exercises should be of the same general character as those suggested for the rural schools, but may be as much richer as the city is richer than the country in art, music, libraries, and forensic talent. The fact is being pressed upon the educational consciousness of the country to-day, very earnestly, that the child should get many things in school, other than the facts of the text-books. The general morning exercises are coming more and more to be recognized and used as a means of culture and character building.

In case there is no assembly room, each teacher can have suitable opening exercises for her own grade.

Half-day Sessions.—The trend of city school management is to-day strongly in the direction of having, for the lower grades at least, only half-day sessions. In some places no grade has more than a half-day session. Where it has been tried the plan has, almost without exception, approved itself to pupils, parents, and school authorities. If two sessions are held daily all or a large part of one of them should be devoted to *study*. It is as much the business of the teacher to teach a pupil *how* to study as to test the results of his effort. If two sessions are held, whether on the old plan or according to the suggestion just made, there should be no home study required of any grade below the sixth or seventh; but all pupils should be encouraged to practice music or drawing, or to read, at home, in lieu of regular lesson work.

"School Fatigue."¹—In arranging a daily program

¹ Consult Kraepelin's "Zur Ueberburdungsfrage" Psycholog. Rev. 6: 204, 573; Pop. Sci. Mo. 55: 511; Report of Nat. Commissioner of Ed., '95-6, 2: 1175; Krohn's "Minor Mental Abnormalities in Children"; Report of Nat. Commissioner of Ed., '98-9, 1: 471.

for a city school the factor of "school fatigue," so called, must be taken more into consideration than in the rural school. In discussing this it is necessary, at the beginning, to discriminate between "weariness" and "fatigue."

Weariness and Fatigue Discriminated.—One writer says "weariness is a fluctuating personal attitude which is scarcely susceptible of record in any form." In other and somewhat simpler words, weariness is due to lack of interest in study or to a positive dislike for it. Arouse interest and weariness vanishes. Monotony, lack of interest and enthusiasm on the part of the teacher, too difficult or too easy tasks, lack of evident usefulness in the subject studied, are the most common and constant causes of weariness, and sometimes produce a veritable mental nausea in the pupil. Right teaching is the only remedy.

Fatigue has been defined as "a reduction in the total effective force of the individual, which can be . . . measured." Weariness, then, is psychological, while fatigue is physio-psychic and pathological. Tests have shown that a pupil may be wearied but not fatigued, and, on the other hand, may be seriously fatigued even when there is still zest for work. Some results of investigations in this subject have been taken to indicate that the specific fatigue poison acts upon the nerve centers so as to inhibit their tendency to conserve energy, after a certain degree of expenditure has been reached, and thus, so to say, the brakes are taken off and work can be done with even greater facility, and more disastrous consequences, than usual. There is so little practical agreement among those who have written most upon the subject of fatigue that teachers may well hesitate to accept any conclusion as definite. Certain it is that the method

of detecting fatigue which is so strongly indorsed by some German investigators¹ in this field is impracticable of daily use even in the hands of an expert; and the method has, moreover, been seriously discredited by experimenters in this country.

Applications to the Daily Program.— There is, however, a more or less well marked daily rhythm of capacity, or at least of effort, in pupils through the school day. Such results of the study of fatigue as are now applicable to the arrangement of a daily program can be briefly stated: (1) The recitation periods should not be too long, six to eight minutes in the lowest grade, and running up to thirty or forty minutes in the eighth grade; (2) there should be frequent rest periods, enlivened by the singing of easy and favorite songs, or simple calisthenics, or the reading of a short story by the teacher; (3) the more difficult studies (the “thought subjects”) should be placed in the morning before the first general recess, and between noon and the afternoon recess. The “culture studies” should occur during the last forenoon and last afternoon sessions, if the whole day is used. One of the most important facts revealed by the investigations upon fatigue is that, rather contrary to the popular idea, set gymnastics produce or intensify fatigue instead of relieving it. Light, spontaneous play is helpful.

Fatigue Rarely Due to Study.— There is a growing conviction, however, that at least below the high school there is little genuine pathological fatigue which can be justly attributed to overstudy. Most observant teachers in the United States are doubtless ready to say that few,

¹ Griesbach's “Aesthesiometric method”; *Archiv für Hygiene*, Vol. 24, p. 124; See *Psychological Review*, Vol. 6, pp. 573, 599.

if any, *healthy* pupils are injured or seriously affected even temporarily by hard study, if it is done under comfortable and hygienic physical conditions and under the spur of interest. Many causes of fatigue lie outside the school; there are dancing lessons, parties, socials, receptions, musicales, and, in the case of not a few pupils, exhausting physical labor or poor food. Many of the results too readily attributed to overwork in school, by numerous critics, can be traced directly to these or other extraneous causes. Causes of fatigue may be inherent in the physique of the child, also. Eye or ear may be defective, and the strain from such defect is severe and fatiguing. The teacher should be sympathetically watchful for cases of this kind, and should give the sufferers all the advantage of position in the room. In many cities medical officers regularly inspect pupils for the purpose of detecting, and prescribing for, defects of the sensorium.

Again, the personality and manner of the teacher and his methods of teaching are far more direct and frequent causes of fatigue, as well as of weariness, than is hard study.

Teachers and pupils can not be reminded too often that hard study *under favorable conditions* is healthful, not harmfully fatiguing; it is almost never the work that is hurtful, but only its method and conditions.

Fatigue through Misapplied Effort.—Pupils often induce fatigue by wasting nervous energy through needless muscular contractions while at work. Such pupils write or draw or do other work “all over,” so to speak, bringing into activity many other muscles than those required to do the particular thing in hand. A good illustration may be seen in a young child just learning to use

scissors; it will soon stop cutting, with a fatigued sigh, and will even lie down to rest.

In connection with this subject also are to be remembered the dangers of much of the careful muscular adjustment required by kindergarten exercises. Until the child is old enough properly to coördinate its muscular activities, any attempt at work requiring close adjustment must result in an overflow of nervous energy into muscles not needed, and marked fatigue is the almost immediate result.¹

If school authorities will see that at school pupils shall have comfortable seats, good light, properly heated and ventilated rooms in which to work, and, above all, teachers over them who can arouse genuine interest and love of doing; and if, on the other hand, parents will see that at home the children eat proper food, sleep plentifully, and avoid *all dissipations*, then but little complaint will be heard about fatigue.²

School Government.—The control of a city school, just as that of any other, is a matter of arousing the interest of the pupils in legitimate activities. When the interest of the pupil is secured all is secured.

With regard to the maintenance of good order in a city school nothing further need be said than was said in the discussion of the country school, except upon two

¹ See the article by Burke, "From Fundamental to Accessory in the Development of the Nervous System and of Movements," in the *Pedagogical Seminary*, Vol. 6, p. 25.

² See for exhaustive discussions of fatigue the following: Bulletin No. 36, of the University of Wisconsin, Madison; Report of the National Commissioner of Education, '94-5, 1: 449; Report of National Educational Association, '98, 550; *Growth of the Brain*, Donaldson (Scribners, N. Y.); *Psychological Review*, 7: 466, 547; *Educational Review*, 15: 246; "La Fatigue intellectuelle," Binet and Henri; "The Study of Children," Warner (MacMillan Co.); Matter of interest will also be found in "School Deportment and the Weather," *Educational Review*, 19: 160; and in *Psychological Review Monograph* No. 10.

points, the relative authority and duty of principal and teachers, and the plan known as "pupil self-government."

Each teacher should be responsible for the order in her own room, and should never call in the principal to reinforce her, or send a pupil to the office for correction, unless the emergency is extreme. The teacher, knowing the facts at first hand, is better able to do justice, and keeping the matter in her own hands strengthens her authority; to call for aid is a sign of weakness.

Pupil Self-government.—Since 1896 a plan has been tried in several cities of this country which, according to the claims of its advocates, relieves principals and teachers of a large share of the burden of school government by transferring it to the shoulders of the pupils themselves.¹ Briefly, the plan consists in organizing the school (at least the upper grades) into a community with its own legislative body and officers, that frame and execute laws compelling the good behavior of the pupils. It is easy to see that when the plan is successful the results must be excellent. It is a thorough, real, and practical training in the responsibilities and privileges of citizenship, and just such training it has long been considered the special duty of the public school to give. Such a plan, successfully carried out, is more than merely an aid to the good government of the school; it is also a *laboratory method* of teaching civics. At least one similar, and successful, experiment in giving boys and girls practical training in citizenship has been made outside the schools,² and from the records of this

¹ See School and Home Education, Vol. 18, pp. 238, 309; Review of Reviews, Vol. 20, p. 673.

² See Accounts of the George Junior Republic, at Freeville, N. Y., in Review of Reviews, Vol. 13, p. 572; McClure's Magazine, Vol. 9, p. 735; World's Work, Vol. 2, p. 1296.

experiment much can be gained that will be helpful to all teachers who strive to prepare their pupils for living in a self-governing American community.

(c) Closing the School

The individual city school should have its closing exercises after much the same plan as those of the rural school. There should be no "letting down" during the last few weeks, no hasty reviewing for a final examination to determine promotions, but a steady, happy holding to the work with increasing power and constancy, and a series of public exercises (including an exposition) on the last day, which shall leave in each pupil a feeling of regret that school is over. During the last week of the session, as during the first, each teacher should show by daily work and example that it is good to be a student, that there is no pleasure so great as that which comes from righteous activity.

(3) THE COLLEGE ¹

The discussion of the distinctive function of the college, the curriculum, the shortening of the course, electives, and such matters, will be undertaken later, and only some suggestions upon the material and administrative side of college management will be offered here.

A. BUILDINGS AND EQUIPMENT

All suggestions made with regard to the structure of city school buildings, and their equipment and ornamentation, apply also to the housings of a college. If there be money enough each department of college work may have its own building, and there should, of course, be

¹ Consult Thwing's "College Administration," Century Co.

architectural plan and symmetry in each building and all the structures should be grouped upon the grounds with regard to the best æsthetic effect. Beauty of material environment is a factor in character making which the college can not afford to be indifferent about and it must call in the expert architect and the artistic landscape gardener.

Assembly Halls.—If the expense can be afforded, a college should have both a chapel for the daily meetings of the students and faculty in religious and other exercises, and an auditorium for the seating of at least twice as many as the chapel is designed to accommodate. The larger hall would be used on all occasions, and they should not be few, when exercises were held which the general public would attend. The assembly hall should be fully equipped for illustrated lectures, and should have a good stage and some stock scenery. A good musical instrument, piano or pipe organ, is an indispensable part of the furnishing of chapel and auditorium.

Cottages vs. Dormitories.—Unless the college is situated in a small town where the community is in full sympathy with the institution, it will usually have to offer sufficient lodging and boarding facilities to accommodate the majority of its students. In such a case, the cottage system is preferable, on the whole, to dormitories, and the cost of cottages is not much more than that of properly constructed dormitories.

If dormitories are built they should have sound-proof floors and walls, and should be fitted with the most hygienic heating and ventilating apparatus, and the plumbing of bath rooms and closets should be above suspicion. Although such suggestions are most matter-of-course, yet they are seldom acted upon except by the

older and wealthier colleges; but whatever the college offers — whether much or little — should be the best, the safest, and the most economical of student health and energy.

B. ORGANIZATION OF THE SESSION

A Basic Unity in all Educational Practice.— There is need of insistent reiteration of the fact that throughout the methodology of education there is a basic unity from the primary school to the highest university. However various and even diverse may be the modes of applying fundamental principles, the principles themselves remain the same; otherwise no science or philosophy of education would be possible.

College interior administration rests upon the same principles as the interior administration of the lower schools. There is no counsel good for the teacher of the one room country school that is not equally good for the college professor or college president, differences being observed in degree but not in kind. The error of not fully recognizing this truth is one of the gravest to be noted in current educational theory and practice. College men have too long supposed that the recommendations of the educationists are only for the teachers of primary schools. No one thing is more needed by colleges to-day than that their professors should make careful, honest, sympathetic study of the science and philosophy of education as a profession.

Work Should Begin at Once.— The chief concern of college authorities, at the opening of the annual session, should be to get all students, and especially those entering for the first time, *quickly and happily at work*. The waste of time and energy that still characterizes the opening days of the session in many colleges is lamentable,

to use no stronger term. Almost without exception every student brings ambition, enthusiasm, and purpose, to the opening of the college year, and to permit these motives to be dissipated through lack of definite work to do, while days are consumed in ineffective efforts to finish entrance examinations and get classes together, is nothing less than criminal. Within three days at the utmost every class should be organized and each student should have his full quota of work assigned him. In this way best can the idly inclined, the homesick, and the easily discouraged be put in the safe road, and the alert and industrious kept from a chafing dissatisfaction. There is no better tonic and prophylactic than earnest, happy work.

Business System Necessary.—To the prompt and effective organization of college work business method and system are as necessary as to the successful organization of a commercial enterprise. Everything, from the president's office to the janitor's room, should bear the stamp of business precision and efficiency. The clerical staff should be large enough and skilled enough to prevent any delay in registering names, receipting for fees, assignment of lodging, and directing the movements of incoming students.

C. THE MAINTENANCE OF GOOD ORDER

"Town and Gown."—A tradition from which many colleges still suffer, but from which they seem to make little effort to free themselves, is that college students constitute a class to whom the laws governing other citizens are not expected to apply. The sooner students are made to understand clearly that they may expect no privileges or immunities that are not granted to all citizens, whether in college or out of it, the sooner will the

number of student escapades and pranks show a marked decrease. The faculty and the civic authorities should coöperate in securing the proper legal punishment of students who transgress law, whether they do so in town or on the college grounds. A young man does not, by matriculating in a college, escape from any of the obligations of citizenship; rather does he by that act of devoting himself to the intellectual life also commit himself to the finer *civic* life. The level of good citizenship ought to be higher in the college than outside. A strong university president well defined the attitude the college authorities should hold toward the students in this matter when he wrote, "I would have pleasure in all amusements or frolics which do not outrage decency, endanger persons, injure property, or interfere with the orderly progress of affairs. When one transcends these bounds he should be punished, and no more useful lesson can be taught to students than that they stand upon no different footing from all other people in this regard."

Need of Right Interests.— With college students precisely as with pupils in the elementary school, the maintenance of good order depends upon the awakening and directing of *right interests*. The average student, if kept occupied with interesting work and left free from unnecessary and irritating requirements, will give the college authorities little or no trouble.

Teaching Power the Greatest Factor.— *The teaching power* of the men and women who make up the college faculty is one of the first and greatest in the list of influences that make for good in the life of the student. The conviction that *knowledge of a subject* by no means necessarily fits its possessor *to teach* that subject inspiringly is gradually forcing a way into the conservatism

of colleges, long the strongest strongholds of opposition to the idea that teaching is a skilled profession. The man who cares more for his subject, for his own growth of knowledge and skill in it, than for making it a means of growth to his pupils may be an expert physicist, or Hellenist, or engineer, but he assuredly is not a good teacher.¹

Mere Knowledge not Sufficient.—The college professor must know his subject, it goes without saying, but added thereto, before he can teach, he must know also the disciplinary and cultural value of that subject, and must be filled with a consuming zeal to use it to the utmost in the development of his pupils. The chief function of the teacher is *to inspire*, and to this end he must use knowledge as a means only.

When all who meet young men and women in the college class room take this attitude toward the work to be done there, and bring to their teaching not only sound and exact knowledge but also a broad culture, and a rich and sympathetic personality, then the relation of professor and student will cease to be that of taskmaster and fag, and college government will become self-government.

A large majority of those who enter college enter with the determination to behave well and to study, and if put actively to work *at once* and held to it by the magnetism of good teaching, will have neither time nor temptation to abandon this first intention. Even the rawest freshman, while he can in no fashion define good teaching, knows it and responds to it when he receives it. It is a pitiful thing to have the enthusiasm of a student killed by poor teaching.

¹ Educational Review, 9: 10.

The "Personal Touch" in College Government

Individual Personal Work of the Teachers.—The strongest influence for good that can come into the life of the young man or woman at college is the personality of the teacher. If any professor comes to feel that he need have no personal interest in his students outside the class room, and none there beyond the lesson work, he thereby loses fitness to be a professor. Each man and woman in the teaching body of a college must feel a close personal interest in both the intramural and extramural welfare of every student in the institution.

The personal value of the professor, his sympathetic interest in his pupils not merely as learners but as men and women, must make itself felt as a living presence in the class room, in one or more of the organizations of the college, and in his own home, to enter which for help and counsel, his students should feel always welcome. The professor who has at heart the character growth of a student, rather than his daily capacity to receive a few facts, will miss no opportunity for kindly watchfulness, or helpful sympathy, or directing word. The formulæ of mathematics, the symbols of chemistry, and the notation of logic may be, most likely will be, forgotten, but the way in which the teacher presents them, the transfusion of his personality through them into the mind and heart of the pupil, these are the things that abide, along with the memory of the kind word, the thoughtful act, the example of dignity and manliness.

Whether in all cases it is well to set apart certain members of the Faculty as "advisers" or counselors, as is done at some universities, is open to question. It does not seem wise to commit to a few men's doing what is equally the business of all.

The Reception of New Students.—As teaching power and personality stand first in point of importance among the factors that make for good order in the college, so the welcome which the college gives to the entering student stands first in time.

From the moment the student, fresh from home, steps off the train to find new duties among strangers, he should be made to feel that the college is for him, to do him service, to recognize his manhood, and to socialize his energies. To no student must the college come to stand as an impersonal and indifferent corporation.

No Published Rules.—Precisely the same reasons given on an earlier page against announcing a set of rules or regulations in the elementary school hold against doing so in a college. Everybody competent to enter college at all knows how to behave well and should be credited with the purpose to do so. Surely a college student has the same right as a prisoner at the bar, to be considered innocent until found guilty; but to receive almost at the very moment of his entrance a printed set of iron-clad rules to which he is required to promise adherence is to receive a gratuitous hint that his motives are subject to suspicion at the outset.

President Draper states the case clearly and correctly when he writes: "I would permit the largest freedom of individual action, on the assumption that it will be in legitimate bounds." When the responsibility for good behavior is thrown upon the student he is more apt to conduct himself properly than if he feels that he can take advantage of the tradition that it is always fair, if not commendable, to circumvent the regulations and outwit those whose business it is to enforce them. If the incoming student is met with a genuine cordiality, an

honest and candid welcome, and a tacit assumption that he is a gentleman and will so comport himself the odds are strongly against his ever making much trouble for the college.

The Social Life of the College.—The most thoughtful consideration should be given by the college authorities from trustees to the humblest tutor, to the social life of the students, and as thorough and adequate provision should be made for it as for the teaching of biology or of mathematics. The social impulses are inherent and strong, and if right direction be given to them and proper opportunities be afforded for their wholesome outworking they can be made most helpful factors in the maintenance of order. In the first place, if the college is coeducational, the young men and young women should be permitted to meet upon the same footing and in the same way that young men and young women who have had a sane and simple bringing up meet anywhere. There is no stronger influence for good order than that growing out of the healthy intellectual comradeship of the two sexes meeting unaffectedly in the regular exercises of the college. Such mingling, under the stimulus of the sort of teaching which puts emphasis upon intellectual achievement, is sure to clear the young mind of mere sentimentality, and establish in each sex a sound respect for the other, a respect leading inevitably to an increase of self-respect and consequent correct behavior.

Social Gatherings.—There should be many gatherings during the session in a well-governed college in which students and faculty should meet in a purely social way.

These meetings, to be most fruitful of mutual helpfulness, should not always be in the form of set, quasi-official receptions. Such receptions are useful, but do

not have the personal quality that marks the hospitality extended to fewer pupils at a time by president and professors in their own homes. It is the personal touch that counts in any psychic constructive work, and, besides, the students have a fundamental right to the training and culture which only the best social environment can give.

Student Organizations

Clubs.—The social impulses of the student body may work out healthily and good order be promoted through various well-organized clubs. A few of these clubs may be purely social, as college fraternities are when at their best, but it is better if they are, for the most part, used as a means of intellectual self-culture. The college should give every encouragement to the organization and growth of the “Chemical Club,” or the “Classical Club,” or the “Good English Club.” Such clubs bring together students having important interests in common, intensify these interests, and emphasize and make popular the culture side of study. In many instances if members of the faculty are present the club meetings will be of the nature of a seminar.

Religious Associations.—The religious growth which is so essential to a proper symmetry of character is as much the concern of the college as the physical or intellectual. Almost all the non-state institutions of collegiate rank in this country were organized with the purpose of making this fact prominent in their work. Although the state colleges and universities of later growth usually refrain from giving prominence to the religious influence, as distinct from moral, from fear of offending sectarians, yet the necessity of providing for the religious needs of the student is coming to be generally recognized. In the last dozen years various organizations have made them-

selves felt upon the lives and characters of the students in a most helpful way. The Young Men's Christian Association, and that of the young women, the Young Women's Christian Temperance Union, and its men's auxiliary, have proved most beneficial in every institution where the authorities have given them encouragement and room to grow.

In some colleges and universities, even those of non-sectarian founding, a noon-day or vesper prayer meeting, voluntarily organized and kept up by the students, is a constant source of help and growth.

All such associations should have the heartiest recognition and encouragement from college authorities and parents; but their organizing and directing force should come spontaneously from the student body.

The social and ethical practices of the college should in all respects be superior to those of the average homes represented by its students. That this is not now true is a fact to be deplored and remedied.

Fraternities.¹—Greek letter fraternities, like other phases of student activity, may be used for good or may become sources of harm. So long as these organizations keep out of "college politics" and hold steadily to their fundamental purposes of good comradeship and social helpfulness their presence should be welcome in any college. It sometimes happens that fraternity men can reach and correct more effectively than can the college authorities wrong influences that may be at work in the life of a fellow-member.

In many places, the fraternities have erected beautiful buildings, made safe homes for students, and brought into

¹ Baird's "American College Fraternities"; Report of National Educational Association, 1890: 707; Thwing, "College Administration."

college life a charm and tradition that have been among the strongest of constructive influences.

Athletics.— Much has been said, pro and con, in the last decade, on athletics in colleges. The subject would be less obscured and differences of opinion less sharp, if it were generally understood that the matter under discussion is really intercollegiate competitive athletics, and not at all the general question of athletics. There is no one who does not believe heartily in the modern doctrine that the college is concerned with the physical education of its students as well as with their intellectual and moral. But there are many, and the number seems to be increasing, who do not believe that intercollegiate athletic contests have anything to do with a proper physical education.

The student, on entering college, should be examined as to his physical condition and needs, and be assigned to prescribed work in the gymnasium. But it has been found that men and women as well as boys and girls need outdoor, *spontaneous* exercise, and therefore college students should be encouraged to spend some time every day in walking, riding, rowing, bicycling, or in play of some sort on the athletic field.

If all the best that has been said in favor of competitive athletics be granted as valid so far as it applies to the individual student, the objection is not thereby answered that the benefit reaches but very few of the whole number of students, and these usually are least in need of the physical benefits supposed to accrue from the training.

If the plea be allowed that athletics develop the ethical nature,¹ the same objection, that not many are called and

¹ "The Ethical Function of Football," N. Am. Rev., 173: 627.

very few are chosen, still holds as to individuals; and the further answer may be made that the best of college spirit and loyalty can be as well cultivated by other forms of intercollegiate rivalries that are more akin to the intellectual ideals for which colleges are supposed to stand. "The Negative Side of Modern Athletics" has been no more forcibly presented than in the following terse paragraphs:¹

"Sport is the one thing in college life which at the present time awakens enthusiasm outside, and it is impossible that this fact should be without effect. . . .

By actions . . . the public, and the educated and cultivated portion of the public in particular, say to the undergraduate that athletics are of more consequence than anything else in a college career. It does not seem possible that under such a state of things the student's sense of values can escape distortion. . . .

. . . but the college on the field of sports touches nobody as an intellectual ideal; in that atmosphere it does not shine forth as an *alma mater* of mental nourishment or of higher aspirations. . . .

The indifference of people in general to intellectual concerns and their greed for amusement are thus burned into boys at the most impressionable period of life, and that, too, under the sanction of the very universities of which the highest function should be that of nourishing the intellectual ideal."²

The Assembly as a Means of Control

The daily exercises in the chapel of the college should be more than merely perfunctory devotional services; in-

¹ Bates, Forum, 31: 287 *et seq.*; N. Y. Independent, 57: 605.

² For further discussion see Forum 16: 634, 32: 309; Harper's Monthly 101: 207; Popular Science Monthly 45: 721; Ed. Rev. 2: 453, 9: 100.

deed, in some state institutions religious services are prohibited by statute.

Attendance at chapel should not be compulsory; absolute freedom to attend or to stay away should be accorded to each student. But the greatest care should be taken to make the exercises so interesting and so valuable that none shall elect to stay away from them. All that was said on pp. 49-51 about the daily opening exercises of the elementary school applies even more strongly to those of the college. The college can not afford to spend less than a half hour upon the program of chapel exercises, and more time will often be needed.

Music.— There should always be music; if the value of it for culture and good government were rightly appreciated no college would be without an organist and a choir leader. There should be a choir made up of students, and there should also be much congregational singing.

Scripture Reading and Prayer.— Unless forbidden by state statute, Scripture reading and prayer should form an essential part of the daily general program of the college. The Hebrew and Christian Scriptures are so full of the best ethical and religious teaching that it is very easy to select fruitful passages for devotional exercises, and yet avoid giving offense to the most sensitive sectarianism.

It seems a mere truism to say that whenever Scripture is read and prayer offered in public, the service should be done with heartiness, sincerity, and spiritual insight into the needs of those who hear. These are especially needed in college devotional services.

Other Exercises.— The daily gathering together of the student body and the faculty affords opportunity for educational influences that can not be brought to bear so

well at any other time. Here should be given simple, helpful talks by president and faculty upon manners and conduct (the college student never gets too old to need such talks); upon the living themes of the day, the discussion of which will make the students strongly realize that they are part of the great human current; upon scientific, historic, or philosophic matters, some knowledge of which must be part of the acquirements of every educated man, no difference what may be his special line of study; upon the duty and opportunity of young men and women to do the world's work and *to enjoy* the doing. In making up a faculty, the authorities of the college should get men and women who can *talk to an audience*, simply, clearly, fluently; there should be no place in a college class room or on a college platform for what has been well named "dumb scholarship."

Into this sort of service may be pressed also whoever among the visitors to the college are able to help. From these may occasionally be had a bit of choice music, a narrative of personal experience, words of counsel, a discussion of current topics, some presentation of the beautiful, the edifying, or the amusing, that shall spice the whole day's work for every student. In ways like these the daily exercises in the college chapel or auditorium can be made so valuable to the students that none shall choose to stay away.

But in addition to these means of general culture and growth, to be availed of almost every day, there must be regular lecture courses, high-class concerts, dramatic entertainments (these often given by the students themselves), all with the purpose of helping the students to the richest life, and making wholesome appeals to the varied interests of youth.

Student Coöperation in College Government

Next to the personal force of the teacher, as an influence on character and its manifestation in behavior, is the personality of fellow students. In some cases the latter influence may even be the stronger of the two.

It is possible so to reverse traditional college practices that the upper-class men shall become the guides and counselors of the freshmen hazing, in its older and rougher forms, at least, shall be obsolete; class "rushes" shall disappear, and superior intelligence and experience shall be brought to do in every way the same sort of service in the college that they are expected to do among ladies and gentlemen who are not in college.

The more mature and thoughtful students, working in harmony with the faculty, can soon create an atmosphere fatal to silly (or worse) pranks, to the vices that eat into student life, to cheating and "faking" in recitations and examinations, in short, to all the things that so often devitalize the higher influences of a college and force the professors into police duty. When a student discovers that lawless conduct and dishonest practices in the classroom are under the ban of any considerable number of his fellows he soon changes his ways. Ostracism is more potent than rules and regulations and faculty Boards of Discipline.

Such student coöperation as is here indicated, co-operation in spirit and in purpose, is the only sort that counts. The final authority, in matters of discipline, must vest in the faculty, and any such complex machinery as student "senates" or "councils," designed to divide authority and responsibility with the faculty, is apt to break down when put to work. The few cases in which such machinery has been somewhat effective only serve

to show what a quantity of energy must be put into the machine in proportion to the effective work done.¹ In one respect, indeed, the organization of legislative or executive bodies among the students serves to emphasize the very thing which it is best to keep in the background, the occasional need of discipline and government administered from without. Laws and the machinery of their execution, whether inside or outside the college, are essentially for the weak and erratic, for those who can not govern themselves from within. The aim of college government should be to make the student body a *self-governing* community.

Recalcitrant Cases

But after all the means have been used for arousing the higher interests of students, for appealing to their social instincts, for so occupying their time that misuse of it will be difficult, for building a helpful public sentiment, there will still remain some "irreducible material," and sharper and more direct methods become necessary.

"Office Talks."—When a college student shows a marked tendency to resist the better influences around him and begins to "go wrong," whether the going wrong affects himself mainly or the college also, he should be quietly called in for a private talk with the president. The president must, it is evident, be the sort of man who can manage that sort of thing with skill and decision, and the result of the talk should be immediately visible in the conduct of the pupil.

Only in the most flagrant cases of misconduct need the faculty be called together for the disciplining of a student. There is nothing, ordinarily, which the faculty as a body

¹ Consult Educational Review, 3: 162; 8: 442; 13: 412; also Rep. of Nat. Ed. Assoc., 1889: 539; 1890: 685.

could do with a refractory case which might not be much better and more effectively done by the president alone.

Notice to Parents.— If a student who is under age, or but little over, manages to get himself called up a second time, kindly and courteous notice of his shortcomings should be sent to his parents or guardian. The efforts of the college authorities to make matters straight ought to be reinforced by the home, and a letter from parents to the son or daughter just beginning to step aside from the right way is very effective. But even if the college secures no aid from the home in giving correction, as sometimes happens, yet the parents have a right to know the facts in any case involving the behavior of son or daughter.

Suspension.— Suspension for a longer or shorter time from all college privileges must be visited upon the student who persists in neglect of duty or disturbs the peace of the college. The suspension must be absolute, leaving no chance for the culprit to hang around the college and annoy or corrupt the orderly or the weak. Immediate notice of suspension should be sent to the parents of the student.

Expulsion.— Expulsion is necessary sometimes as a last resort, when the student's ways become plainly past mending by any of the college influences, and his presence becomes a constant menace to good order. It is always best that the expulsion should be quietly and privately effected; it is very doubtful whether a public expulsion ever had other than an ill effect upon the student body. Expulsion is to the college what capital punishment is to the state, and it should be as quietly effected; public expulsion is no more defensible than public hanging. Public punishment makes a hero or a martyr of the student.

D. CLOSING THE SESSION.

The same principles of economy are to govern in the closing weeks of the college as in those of the lower schools. Interest must be sustained to the last and effort and accomplishment must not flag. The last week of the session should be crowded with such features of interest, besides the commencement day exercises, as will attract visitors, gratify all who are interested in the growth of the true educational ideal, and draw them into a closer loyalty to the college.

The closing exercises may consist in part of an exhibit of the material resources of the institution and of the power and training which its graduates have secured, and in part of one or more addresses which shall review the progress of education or of learning, in general and in that college, and forecast the next movements forward.

A College Exposition.—A college will always find it worth while to show to the public, in a proper and dignified way, its material resources. This it should be ready to do at any time, but especially at commencement, when the number of visitors is large. Along with the opening of the class rooms, libraries, and laboratories, for inspection, should go also the exposition of such work of the students as has been given concrete expression. (Compare p. 58.)

Graduates' Day.—While there is a growing tendency strongly to modify the old form of commencement exercises,¹ yet neither the general nor the educational public will allow the traditional characteristics of commencement to become wholly obsolete. Certainly the people outside the college, who give it in one way or another its financial and moral support, have a right to an oppor-

¹ Ed. Rev. 2: 79; 9: 427.

tunity to judge the immediate results of the work the college does. Somewhat of the value of the college should appear in the commencement work of its graduates.

To say, as one writer does, that "the exercises of the day, as in general carried out, no longer represent progress in educational affairs"; that "immature students, with little or no practice in public speaking, are expected to do what would appall an older and more experienced speaker" merely throws the deficiencies of much of college work into clearer relief. The speeches of the graduates, in subject-matter and delivery, ought to "represent progress in educational affairs," and "practice in public speaking" is, surely, one of the things a college is supposed to give its students constantly throughout their four years' stay. If a student can not put some part of what he has gained in four years, in knowledge and power, into good, clear English, and deliver it with force and sincerity to a sympathetic audience, then it must be said it is not the student commencement speaker that ought to be abolished!

But the demand that the graduates shall be given a day to themselves and their audiences is reasonable, though "graduates' day" should be looked upon as no whit less important than commencement day itself. One important result of exercises of a high grade of excellence on graduates' day, a result which the college ought gladly to strive to intensify, is the inspiration and stimulus given to the undergraduates and to the young men and women, not yet matriculates of the college, who make up so large a part of a commencement audience. They should be made to feel the spur of ambition, and be quickened with a desire to be among those who live the higher life of thought and action.

Commencement Day.—The last day of the closing session or term, should be devoted to the bestowal of degrees and the presentation of diplomas, to such other official functions as may be customary, and especially to the discussion before the public of some living educational problem. The general public rarely has or uses an opportunity to hear an expression of expert opinion or experience on educational themes. The college commencement, rightly looked upon as a popular rather than as a professional event, affords an excellent opportunity of presenting to an intelligent but non-professional audience the present issues of education.

The whole plan and purpose of the closing days of college must be to continue and distinctly to emphasize the year-long and constant function of the college as a source and center of educational power, revealing the values of the intellectual, the spiritual, and the social life as against a gross and corroding materialism.

(4) THE TEACHERS' TRAINING SCHOOL

A. EQUIPMENT.

(a) Grounds and Buildings

The academic work of the teachers' training school does not require either buildings or grounds different in character from those adapted to the college.

Model School and Practice School Buildings.—The professional work of the training school, however, requires model schools and practice schools for illustrative purposes, and the buildings in which these are housed should be separate from other buildings and planned for their own specific uses. There should be buildings for city graded school work and others for rural school work, and each kind should be a model for its purpose,

showing the very latest and best adaptation of structure to school use, and at the same time illustrating how material, construction, and equipment may be made to conform to the requirements of climate and other local conditions, all at a cost within the reach of the urban and rural communities which the training school serves. The buildings for the model and the practice rural school will in most cases, naturally, be in the country; and model roads leading from the town to these buildings would be an excellent, and usually much needed, object lesson. There should also be rooms and grounds for the illustration of the value of manual training and school gardening.

(b) Furniture and Apparatus

For the academic work of the teachers' training school the same kind of furniture and apparatus will be needed as in the college; for the best part of the distinctively professional work the training school will need pedagogical museums and laboratories.

Pedagogical Museums.—Museums of pedagogy are as indispensable to the right study of the history, the evolution, and the current practice of education as museums of geology and biology are to the intelligent study of those sciences.

The museums of educational history should show (1) types of school furniture from the earliest educational epochs to the present, (2) samples of school apparatus, (3) samples of text-books in all the subjects of the common schools and high schools, and (4) pictures of great educators, of apparatus of which actual samples are not obtainable, and especially of school houses, grounds, and decorations. Many of these pictures may be in the form of lantern slides for use in lectures. The model school is also a museum, and in it the student should find

for observation and study all that is best in modern educational practice. The equipment must be the best, and the teaching should all be done by experts in a way to illustrate the latest conclusions of pedagogical science. It will usually be found advisable to collect a tuition fee in the model school, in order to keep the number of pupils within proper limits, and to divide the attendance with the practice school. Only one model school of each kind — urban and rural — is needed.

Pedagogical Laboratories.— Practice schools are, in the truest sense, pedagogical laboratories and if teaching is ever to become a science it must be largely by means of such laboratories. They are as necessary to the training of the teacher and to the scientific study of education as chemical and physical laboratories are to the training of the physicist and chemist, and to the scientific study of physics and chemistry.

For the proper work of a large teachers' training school, several practice schools of each kind — urban and rural — will be necessary. They should be used not only for testing and training the pupil-teacher, but also for "trying out" new educational theories and retesting old ones. It may be said here with emphasis that if a pupil-teacher fails in the practice school to come up to a certain high standard of fitness and skill *he should not be granted a professional diploma or certificate, no matter how high his standing may be in the academic work.* Unfortunately, few state normal schools in this country observe this rule.

Likewise, no theory of teaching should be passed on into the model school or published under the authority of the training school, unless it gives good results upon trial in the practice school.

Some strong objections have been urged against practice schools, as being too suggestive of the clinical practice of vivisection. The plea is made that children are too precious and costly to be used as "raw material" upon which to test either new teachers or new theories. The best answer that can be made to the objectors is that every year thousands of young people who have never spent a day in a normal school practice upon the innocents without guidance or direction, and it is far better for the thousands of children that a few hundreds should be experimented upon under the most favorable material conditions and under expert, sympathetic direction.

B. ORGANIZATION AND ADMINISTRATION.

All that has been said of the college under this head applies with equal force to the teachers' training school.

Headquarters for Educational Associations.—The training school needs to keep in closer touch with the teachers and officials of the elementary schools throughout the state, than does the college. To this end it would be well to make the training school the headquarters of educational meetings of all kinds, placing at the service of state and local associations the assembly room, and rooms for the use of officers throughout the year.

Educational Bulletins.—The state training school should, in coöperation with the office of the State Superintendent, be active in sending out to teachers and school officials all over the state, bulletins embodying the results of educational experiments, suggestions of other experiments to be made by teachers, statistics of education, interpretations of the school laws, and such other matter as would be of interest and value to the teacher at work.

II. ORGANIZATION AND ADMINISTRATION OF SCHOOL SYSTEMS

Some of the gravest problems that are presented to the educational economist to-day are those involved in organizing into a system and administering, without waste, the agencies of formal education, the schools of a community, be it state or city. Several conditions, inherent in our forms of government and political methods, increase the difficulties of these problems. Money must be had from taxpayers who are often indifferent and sometimes hostile to public education when it makes demands upon their own pockets. Laws governing both the external and internal organization of school systems must be made by men who often know little and care less about the public schools as agencies of education. And the immediate administration of the schools is too frequently placed in the hands of persons who are either indifferent to their responsibilities or undertake them in order to advance their own particular interests.

However, in spite of these things there is going on a gradual educational uplift and the children and youth are coming into their own; but it is still pathetically true that they do not get adequate returns from the money spent for them, and for the time they spend.

To show how good results have been reached and to suggest some other methods of practical economy, are the objects of the following pages.

(I) ORGANIZATION AND INTERRELATION OF SCHOOL UNITS

A. THE STATE SYSTEM.

(a) The Rural Elementary School¹

However good the schools of a state may be, individually, there is no "system" unless the several schools of like grade are organized upon a common plan and all schools owing their existence to state legislation are brought into relationship to one another in work and results.

The first question to be answered in the attempt to construct a state system of schools is that of maintenance, or financial support; and the second is the interrelation of schools into an organic system.

*Maintenance*²

Sources of School Revenues.—Although some revenue is derived from state lands, Federal land grants, and various other such sources, the largest part of the money with which public schools are supported must come from taxation, state and local. Money to be paid out from the state treasury may come from the interest upon a permanent state fund, or from the proceeds of an annual tax, or from both. The state should supply a part of the money in order that a fixed minimum of income may be always available in each community, and in order that, as in some states, the weaker schools may receive special help. But however much the state may pay in support of schools, the greater part, or at least an equal part, of the whole amount devoted to elementary and secondary education, should be derived from local taxation.

¹ Ed. Rev. 10: 170.

² See the "Report of the Committee of Twelve," University of Chicago Press.

Local Taxation Best.—Responsibility for the proper spending of money is most apt to be felt when it is derived from a direct local tax. A community usually looks upon any sum coming from the state treasury as a sort of gift, and the old proverb, "comes easy, goes easy," applies. To receive from the state all or the larger part of the money used in support of public schools deadens the nerve of local interest and so of local effort. This condition has long been the curse of public education in some sections of this country. The schools have been, and are, supported almost solely by the state, and this, coupled with the name "free schools," has made almost ineradicable the idea that the schools are for charitable purposes and have no just claim upon the childless taxpayer. A good local tax means local interest, local effort, and personal concern to secure economical expenditure and the best results.

The Local Unit of Taxation.¹—There can be no doubt that the single school district is the least desirable unit of taxation, and it only remains to determine what larger unit should be used. The county is the best in all states which are made up of small counties, and in which the county is the practical unit of civil organization, both of which conditions are true in most of the southern states. The township system is the best in states whose counties are relatively large, and where the township (or town) is usually the civil unit. There should be as little duplication as possible of the machinery for collecting and distributing money for the purposes of community life, and therefore the school unit and the civil suit should, when possible, be coextensive.

¹ See the Report of the Commissioner of Education, 1894-5; 2: 1457; Educational Review 16: 254, 435; and 17: 465; Reports of National Educational Association, '90: 432, and '91: 211.

The Distribution of School Money.— In practice and theory alike it seems best for school sites to be bought, houses to be built and equipped, provision for all incidental expenses, repairs, fuel, light, etc., and a part of the teacher's salary, to come out of the local revenue, and for all of the state revenue to be applied to the payment of teachers.

The real problem of distribution is that of a just basis of allotment to the smaller school communities. There are two methods of distributing school money: first, an allotment according to the school census; second, an allotment of a fixed sum to each district. Each of these modes of distribution is modified to suit different localities, and in some cases both are combined. That method of distribution is nearest the ideal, which gives special aid to the weaker school communities, and at the same time stimulates the teachers' professional zeal, and encourages local interest in the schools in respect both to attendance and to financial support.

The "Fixed Sum" Plan.— Some states, of which New Jersey is a type, allot a fixed sum for each district. This plan puts districts upon an equal footing and gives as much support to the weak as to the strong. Other states, as California, allot a fixed sum for each teacher, which serves practically the same purpose as that of allotment to the district. Either mode of distribution tends to cause a multiplication of districts and teachers, but this tendency may be corrected by legal limitations.

The "School Census" Plan.— The method of allotment at a *per capita* rate based on the number of children of school age has the merit of simplicity and the demerit of little regard for the relative financial strength or weakness of school communities. However, the demerit is not

so grave as it appears. The most teaching is needed where are the most children, and very generally the most children are to be found in the poorer districts. A modification of the census plan, in effect in California and New Hampshire, is based upon attendance. Such a modification is good in communities where there is no compulsory attendance law, and is helpful in the enforcement of such law where it exists.

A Composite Plan.—A composite plan of distribution, embodying the best features of the modes in vogue in states which have given most consideration to this matter, may be outlined as follows:

(1) The state money should be allotted to the county (or township) in proportion to the school census, with the proviso that the county (or township) shall raise by taxation a sum bearing a fixed ratio to the amount received from the state. This ratio should hardly be less than one third.

(2) The further apportionment of the total fund, less a five per cent reserve, should be made by the county (or township) superintendent, or treasurer, on the basis of the *grade of certificate* held by each teacher actually employed, contracts with teachers having all been drawn prior to the time of such apportionment.¹ The discussion of the certification of teachers may be anticipated here enough to say that for the purposes of the apportionment indicated above there need be but four grades of certificates at most, two granted by county authority and two granted (or indorsed) by the state. The payment of money to the teachers may be made on a fixed minimum

¹ In Indiana, the law provides that the daily wages of teachers "shall not be less than an amount determined by multiplying two and one-half cents by the general average" on the teacher's certificate; School Law of Indiana, 1901, p. 215.

of salary as a basis, or the whole amount may be divided according to a series of ratios. For example, the fixed minimum salary may be \$300, and the other salaries multiples of this; and the ratios, in ascending scale, may be 1, $1\frac{1}{2}$, 2, $2\frac{1}{4}$. Thus, if the method of a fixed minimum be followed, teachers holding the lowest grade of certificate will receive \$300 each for their services; those holding higher grades will receive \$450, \$600, and \$675 respectively. If the method of a series of ratios, starting from a variable base, be used, then a county (or township) having a net sum of \$40,000 to be distributed among eighty teachers, ten holding the lowest certificate, fifty holding the next higher, twelve the next, and eight the highest, would pay to each of the ten a minimum of \$314.90, to each of the next a minimum of \$472.35, and so on up.

(3) The five per cent reserve and the sum derived by neglecting fractions of cents in the division, should constitute a fund for encouraging attendance, and should be placed to the credit of such districts as show during the school term a certain percentage of average attendance; perhaps seventy-five per cent of the enrollment would not be too low a requirement.

Advantages of the Composite Plan.—It is believed that several marked advantages inhere in the plan of distribution outlined in the preceding paragraphs.

In the first place, the method is simple and easily adaptable to local conditions anywhere; there is a minimum of machinery about it.

The distribution of state money to counties or townships on the basis of the school census lends the aid of the state, as a rule, to the localities where the need of teachers is greatest.

The requirement that the smaller taxing unit (the county or the township) shall supplement the amount received from the state brings home to the people their responsibility and duty of self-help. Leaving this supplementary sum in the hands of the local authorities to expend increases the interest in the schools and strengthens the feeling of responsibility for their right management.

Payment of teachers according to the grade of their certificates must exert a powerful and direct influence in the direction of more thorough academic and professional preparation and higher standards. If differences in grades of certificates mean anything they should mean differences in capacity, and greater capacity, or less, should mean a larger salary, or less.

Another decided advantage of payment according to the grade of certificate is found in the fact that under such plan the weakest district may have a strong teacher; indeed, the smaller districts will be the more eagerly sought by teachers, because of the lighter labor demanded in the small schools.

The equitable distribution of the five per cent reserve on the basis of average attendance would have an effect altogether good. This money should be passed to the credit of the district upon the books of the superintendent or treasurer, and its use should by law be limited to building, repairing, or furnishing. Such an arrangement would quicken in each taxpayer a personal interest in securing good attendance throughout the school session.

Supervision and Administration

The State Superintendent.—At the head of the school system in each state is a superintendent, or some official with similar title and functions. In few states, however,

does the state superintendent have, under the law, other than clerical duties. In some cases he has also, to a limited extent, judicial and executive functions relative to the school laws. Beyond prescribing a course of study, or daily program, he has usually but little power as a supervisor of schools; he can only recommend educational policy.

But while the legal duties of the state superintendent are thus limited, he may do most important and excellent service to the cause of education. His counsel is always sought and often followed by legislative committees charged with the task of making changes in the school law. If, therefore, the state superintendent be a man of strong personality and clear-cut views of educational needs, he can have a direct and helpful influence upon school legislation. So also if to personal force and clearness of educational vision, he can add fluency and adequacy of expression, if he is a "good talker," he can accomplish decided results among teachers and people. He should go over the state, visiting and addressing teachers' institutes and associations and popular meetings gathered in the interests of education. He must be in the highest sense an educational evangelist. No one should be eligible to the office of state superintendent who has not had abundant and successful experience as a teacher, and the pay and opportunity of doing good service to educational progress should both be such as to tempt the best equipped men to accept the office. The state superintendent should be *ex officio* a member of the board of trustees of each state educational institution. His opportunities, in such a position, would be excellent for reënforsing the educational influences of the state.

The State Board of Education.—The state boards of

education in the different states have widely varied duties prescribed by law. The functions which seem distinctive, and that justify the creation of such a board as a part of a state's educational machinery, are (1) to frame courses of study and reading for pupils and teachers, (2) to prescribe general rules and regulations for the management of the schools, and (3) to examine and certify qualified applicants for state certificates. In not a few instances the state board of education and the state board of examiners are distinct bodies. In some states the board of education is made up of *ex officio* members, being composed of the secretary of state, attorney general, and the heads of the different state educational institutions; in others, the members of the board are elected, and in still others they are appointed by the governor or by the state superintendent. In whatever way the board is created, the state superintendent should be either its chairman or secretary, with authority to direct, or to take a prominent part in, the deliberations and acts of the board.

The County Superintendent.— Nearly all of the states have county supervising officers. As a rule, in all these states the authority of the county superintendent is over only the rural schools. There is practically unanimous agreement among students of education to-day that the rural schools need close, intelligent supervision throughout a county, or some smaller unit of school organization.

To give such supervision men and women must be chosen as superintendents who, by scholarship, professional training, and successful experience, are properly qualified for the work. A recognition of this truth is embodied in law in many states, and no one is eligible to a county superintendency who does not hold a legal certificate of qualification. If such a safeguard be properly

observed, it matters little whether the supervising officer be elected or appointed. Like the state superintendent, the county superintendent should be competent to address persuasively and convincingly any public gathering, and be able to show the need and value of sound education. A large part of his work should be educational evangelization.

Duties of the County Superintendent.—The county (or township) superintendent is the most important school officer in the whole rural school system. Through his active service the uplift of the schools must come, or through his inefficiency or neglect occur their degeneration and decay. In addition to his clerical duties he discharges, in most states, executive and even judicial functions also. He grants and, for sufficient reasons, revokes certificates; orders the erection or repairing of school-houses; creates new districts; holds institutes; and decides minor points of law. In some states where there is no county treasurer, the distribution of the school fund is one of the most important duties of the county superintendent. In addition to these things he is required by law to visit and supervise all the schools in his county.

The County Board of Education.—The most economical administration of the educational business of a county (or township) can be secured through a county (or township) board of education, rather than through purely local district boards of directors acting independently in each district.

Such a board of education should be empowered by law to contract for the erection and repair of houses, the purchase of all supplies, the employment and dismissal of teachers, the selection of text-books, and the levying of the county or township school tax. The authority and

work of the county board should be supplemented in each local district by not more than one district trustee or director, who may be either elected, or appointed by the county superintendent, and whose duties should be to visit the school, look after its equipment, make requisition upon the county board for needed supplies, and report upon the character of the work done. Where truant officers are needed, these district trustees may also serve as such.

Advantages of a County Board.—The advantages of placing the administration of the schools of a county or township in the hands of a central board are recognized by educators, but in a theoretical rather than a practical way. Very few states have so far adopted the plan of a central board so fully as above outlined. The chief advantages of such a plan are evident.

(1) It uses the civil unit as the unit of school administration.

(2) It dignifies the office of school trustee by making it a *county* office and thus secures the selection of better men than the present average local trustees. It is a fact which speaks for itself that in any given county the average of intelligence and of official competency is higher in county (or township) commissioners, or supervisors, or in a fiscal court, than in a local district board of trustees. The people of a community are much more watchful of the official acts of county officers, and hold these officers to a stricter account than in the case of lesser officials.

(3) In consequence of these facts it would be much more difficult to bribe or otherwise wrongly influence a county or township board than a local board, and the members would in every way be further removed from petty local influences.

Some test should be used to determine the fitness of

persons to serve on this county board of education. The members should be graduates of the public schools whose interests they are supposed to have under their care.

A Complete County System.—The general plan above suggested could be much more simply and therefore effectively applied if the rural schools of a county and the town and city schools, except in the case of the large cities, were all placed upon the same footing and under the same administration. The practical working of such a plan has been for many years most successfully illustrated in Richmond County, Georgia.¹ The fundamental principle seems fully operative there, that education is the duty of the whole community, and that the wealth of the community as a whole should be laid under tribute for the discharge of this duty. In that county the rural schools and those in the towns are under the same board and superintendent, the teachers in town and county receive the same wages for the same grade of work, the school terms are the same length, and the pupils receive the same advantages.

The plan has received the indorsement of the Committee of Twelve on Rural Schools, whose report says, "The subcommittee confidently believes that this mode of school organization has a great future before it in the United States." The strange fact is that this simple and economical method of administering the schools of a county has not been used in other states. All that can justly be said about the plan at all must be said in its favor.

Teachers

Responsibility for the condition of the schools in a given community will be found moving in a circle; if the people

¹ Ed. Rev. 11:369; "Report of the Committee of Twelve," p. 132.

were more awake on educational matters they would require better service of school boards; if there were better school boards, with awakened public sentiment behind them they would employ better teachers; *if the teachers were better, they would make the community sensitive to its educational needs*, or would at least bring up another generation that would be educationally progressive. The gravest indictment that can be brought against the common schools is the fact that the citizenship which they produce is so indifferent as it is to them and their work. So it would seem that, in the last analysis, the responsibility for educational conditions, good or bad, lies with the *teachers*.

Elements of Fitness.— Before a teacher is certificated as such, his fitness must be ascertained, and to determine this it is necessary to know what elements constitute fitness to teach.

School communities, when unbiased by merely local considerations, have recognized in greater or less degree that the elements of fitness found in the good teacher are physical wholeness and soundness, knowledge of subject-matter, professional skill, unquestionable morals, and a liberal culture at whose core is an enthusiastic and magnetic personality.

No method has been formulated, or can be, for determining the presence of all these elements in the person of an applicant for a teacher's certificate.

Physical Wholeness.— In no state, yet, is an applicant for a teacher's certificate required to present any evidence of physical fitness to enter upon the labors of the school-room. But a growing knowledge of the causes and communicability of disease, and of the relation between a sound body and mental fitness will soon bring parents to

the point of demanding that a teacher's certificate shall vouch for his soundness of body. Children are highly susceptible to untoward influences, as well as to those that are favorable, and the wholesome efficiency of any teacher would be greatly diminished by marked deformity, or ugliness of form or feature; and the pupils would be imperiled if they were in charge of a teacher who had any communicable disease, such as consumption.

Knowledge of Subject-matter.—Although even the “man in the street” would assent to the proposition that the teacher must know his subject, yet few examining boards hold the standard so high as to insure on the part of teachers clear and accurate knowledge of fundamental facts and their relations in the common-school subjects. Of course, a teacher should know his subject beyond the limits of any one text-book; text-books are for *pupils*, not for teachers, and Goethe has said, “Nothing is more frightful than a teacher who knows only what the pupils are expected to know.” The most reliable evidence of a teacher's adequate knowledge of a subject is not the “per cent” shown on his certificate, but his ability to conduct a recitation in that subject, *without a text-book in hand*.

Professional Skill.—Very slowly the fact that knowledge does not necessarily give power, much less skill, is forcing a recognition. Many holders of high-grade certificates fail in the schoolroom; with knowledge of arithmetic or science does not by any means always go ability *to teach* arithmetic or science. Some things most essential to successful teaching, namely, sound common sense, abounding enthusiasm, and abiding character, can not be tested by any sort of formal examination. These can be evidenced only through teaching, not merely the

artificial teaching in a practice school, but teaching under the complex conditions of the multi-graded rural school.

It is but right to demand, then, in the name of the children, that no one, no matter what his scholarship may be, shall be given other than a probationary certificate until he has first proved his teaching power by marked success in the management and teaching of a school. The supervision of the rural teachers' work must be intelligent enough and close enough to enable the supervising authority to give trustworthy testimony to the teachers' professional fitness or lack of it, and if, as often happens, professional power does not develop during the probationary period, then an advanced certificate should not be granted at all.

Moral Character.—The importance of sound morality of thought and life in one who would teach has long been recognized, and the recognition is incorporated directly or indirectly in the law of every state. Applicants for certificates must present evidence of moral fitness before entering upon examination; and in most states the county superintendent is required by law to cancel the certificate of any teacher who is guilty of a lapse from morality.

A safe rule for an examining board to follow in determining the moral fitness of an applicant is, "The ethical level of the teacher's life must be much higher than the average level of the whole community."

Culture.—All the elements so far enumerated as necessary to the equipment of a teacher are to be found in varying degree in the something we agree to call "culture." But having all these, the teacher may yet lack culture. Health, adequate knowledge of subject-matter, professional spirit and skill, and sound morals must be interfused with a genial and strong personality, some ex-

perience of the polite world and its conventions, and an easy familiarity with the current movements in the more important departments of human activity. If it be said that in the last few paragraphs a rather high standard is set for rural teachers who work for an average of thirty to fifty dollars a month, then the answer must be that without high standards no progress is possible, and that the best is hardly good enough for the children of the country. Individually they have a right to as good teaching as any other children, and collectively they constitute about two thirds of the total school population.

*Certification of Teachers*¹

Until the work of elementary teaching becomes a profession and is so recognized, some such methods as at present in vogue will be used for ascertaining the approximate fitness of a man or woman to discharge the duties of a teacher. In the majority of cases the methods of certification rest at bottom upon an examination either conducted directly by the certifying authorities or held as a prerequisite to the obtaining of a training school diploma which may be indorsed by the certifying board. It needs but little argument to show that an examination, which as usually conducted is chiefly a test of memory, is essentially a wrong basis upon which to rest the declaration of a person's fitness to teach.

To grant certificates based solely upon an examination, or to accept training school diplomas also based mainly upon examinations, is perhaps the present best that can be done in the case of persons just entering the ranks of teachers. But any certificate legally good for a longer

¹ "Report of Com. of Twelve," p. 90; Circ. of Information No. 6, 1888, Bureau of Ed., Wash.; Circ. of Information No. 2, 1889, Bureau of Ed., Wash. See also School Laws of various States.

time than one year should be based also upon properly attested successful experience.

Number and Grades of Certificates.— Not more than four grades of certificates need be granted under state and county authority, to those who are to teach in rural schools, including rural high schools. The county examining board should grant two grades, good for one and four years respectively, and usable only in the county of issue; and the state examining board should grant two grades, one good for eight years and usable within the limits of the state in any school directly under the state or county authority below the high school.

The higher state certificate should be good for life, except in case of failure for two consecutive years to do some sort of educational work, and should entitle its holder to teach in any school of a rank not higher than that of a first-class high school.

The difference in grade in these certificates should be based upon scholarship, professional training, and terms of experience, the two highest being granted only in recognition of high academic acquirements, tested experience, and *specific professional training*.

Employment of Teachers

Teachers should be employed by township or county boards of education, not by local district boards. Employment by local boards is too apt to be governed by nepotism or other forms of favoritism. The county or township board should meet on a given date, previous to which all applicants for schools should have been required to file their applications, certificates, and testimonials, and should within a legal limit of five days assign teachers to the schools, and fix the dates upon which the schools should open.

The teacher should be employed for the whole term of school. In some places the wretched practice obtains of dividing the school term among two or more teachers, in order that each may have a little share of the public money! One of the most evil of present rural school conditions is the short tenure of position in any one place by the same teacher.¹ To remedy this, employing boards should use every means available. Contracts might be made for two or more years with teachers holding the higher certificates.

Length of School Term

According to the Report of the Commissioner of Education for 1899-1900, two states, Massachusetts and Connecticut, report an annual term of 189 days, and the length of the term runs all the way down from that figure to 70.8 days in North Carolina. In most states a minimum term is fixed by law, but in few is it sufficient. In no case should a rural school remain in session for a shorter time than seven school months. If every state should fix the minimum term at this number of months, there would soon be a marked decrease in the percentage of illiteracy. No really economical use can be made of the pupils' time and energy in a shorter time than this.

But, not counting the indifference of the people, which is the gravest of all obstacles to progress, there are in some parts of the country at least two practical difficulties in the way of extending the school term. These are a lack of money with which to pay adequate wages and provide schoolhouses that can be used in the winter months, and the other, indirectly attributable to the same cause, is bad roads. For these things the sole remedy is *education*.

¹ Report of National Educational Association, '87: 307.

Spring Schools.—Many states in which the length of the term is correctly reported officially as only four or five months, yet actually have a longer term. After the regular public school is taught, a “spring school” is organized and continued for two or three months. The spring school is a “subscription school,” in many instances being supported wholly by the subscriptions of a few well-to-do families in the district. There appears to be no good reason why men of wealth should not endow elementary schools as well as the college or university.¹

The spring school should receive from the local and county authorities semi-official recognition and encouragement, in all cases, at least, where it is practically impossible to extend the term by a local tax. No one who does not hold a legal certificate, or its equivalent, should be permitted to use the public schoolhouse for a subscription school, and the permission to use the house should always be given with the proviso that the school *shall be free to all children of school age in the district.*

Voluntary Teaching.—In North Carolina, and possibly other states, in order to lengthen the school term, students in state or private teachers' training schools are encouraged to supplement the regular term in the rural schools with two or three months of teaching without other compensation than board and lodging. Good results for the schools are reported, and certainly the training the pupil teacher gets in that way is as practical and valuable as that afforded by “practice work” in the teachers' training schools, more so, in fact, for the teacher gets the training of the “first day” of school.

¹ A splendid object lesson has been given by the Hon. J. H. Stout in endowing public schools at Menomonie, Wis. See *World's Work*, 7: 4540.

Concentration of Rural Schools

The plan known as "consolidation of schools and transportation of pupils"¹ has been found a potential remedy for many ills that affect rural schools. It has received the unqualified indorsement of school authorities wherever it has been tried, and it has been tried in such widely separated and different parts of this country (in Massachusetts, Ohio, Iowa, and Florida, for example), that a general conclusion as to its efficacy may be safely drawn.

Under this plan small, weak schools are abolished, a large building is erected at some central point, and men are employed to transport the pupils from home to school, and back, in covered wagons. Some of the more marked results have been found to be (1) largely increased attendance and no tardiness; (2) better health of the children by reason of more comfortable schoolhouses and protection from bad weather in going to and from school; (3) larger wages for teachers and therefore better teachers and longer terms, by reason of not having to divide the money among several districts; (4) the better grading and classifying of pupils, and consequent opportunities for using improved methods of teaching; (5) greater social solidarity in the community.

Here educational economy and political economy come into contact, for consolidation of schools is hardly possible without good roads. The only cure for isolation is to facilitate transit from place to place.

¹ Report of the Committee of Twelve, p. 135; *School Review*, 8: 213, 335; Report of the Nat. Commissioner of Ed. 1894-5, 2: 1469; 1895-6, 2: 1353; Report of the State Supt. of Iowa for 1900; Wisconsin State Superintendent's Bulletin No. 5 (1900); Bulletin No. 71 (1901) Penna. Dept. of Agriculture; "The Consolidation of School Dists., etc.," Dept. of Pub. Inst., Neb., (1903); *Educational Review*, 20:241; Report of Nat. Commissioner of Ed., '99-'00, 2: 2581; same for 1901: 161, 2396; Proceedings of N. E. A., '01: 293; Proceedings of N. E. A., '02: 224, 793.

*Compulsory Attendance*¹

A logical corollary to the proposition that the state and the local community shall supply the means of education for all, is that all shall use the means afforded. Any argument valid for public education is equally valid for compulsory school attendance.

This proposition is far reaching and like many others in educational economy touches political economy and sociology at several points. Since compulsory laws, in order to avoid conflict with the constitutional guarantee of religious liberty, must provide that parents may send their children to schools other than the public schools, if they so desire, the question of at least indirect state supervision of private or parochial schools is also involved.

It seems clear that states in which compulsory attendance laws are in force have a right to require that private schools, to which children may be sent under the conditions of the law, shall come up to a certain standard of work. Morally, the state has no right to enforce attendance anywhere unless the teaching is good, the houses comfortable and safe, and the roads in proper condition for travel during the time attendance is required. A compulsory attendance law must be reënforced by laws regulating or forbidding child labor in mills, factories, sweat-shops, and mines.² Enlightened public sentiment is beginning to demand legislation also regulating the labor of women in these places, as having a very direct bearing

¹ Reports of the Nat. Commissioner of Ed. for 1888-9, 1: 470; 1894-5, 1: 1118; 1895-6, 2: 1350. For the practical working of compulsory attendance laws, see the Report of the National Commissioner for 1893-4, 2: 1351, *et seq.*, and reports of State Superintendents.

² Rep. of Nat. Commissioner of Ed., '99-'00, 2: 2598; Bulletin of Bureau of Labor (Wash.), May, 1904.

upon the physical and mental capacity of children to use the schools the state provides. Intimately bound up with the matter of compulsory attendance is the question of schools for truants and incorrigibles.¹

It has been clearly demonstrated that a compulsory law is practically a dead letter, unless provision is made for special truant officers with power of arrest.

Text-book Supply

Every state has carefully drawn laws defining the terms and condition of text-book supply.² But while the common purpose of all these laws is to safeguard the public against possible fraud or extortion the methods used to accomplish this differ widely.

The State as Publisher.—California publishes the school books used in the public schools. Indiana may, legally, either publish school books or contract with private companies to supply them. Other states have considered the expediency of publishing the books to be used in their public schools, but have so far not done so.

The Bonded Contract.—In some states a state board fixes the prices at which the books shall be sold, and asks for bids from book publishers to supply them at these prices, accepted bids to be guaranteed by bond.

Some form of the contract plan seems to afford ample protection to consumers against over-charges for books, and at the same time secures, through open competition, the best books published anywhere.

¹ This phase of educational management receives very full exposition, historical and descriptive, in the Report of the National Commissioner of Education for 1899-1900, 1: 85. Abundant references upon the subject will also be found there. See also N. E. A. Report, 1901: 820.

² For a digest of these laws consult the Report of the Commissioner of Education for 1893-4, p. 1063, *et seq.*, and for 1897-8, p. 893. Consult current reports of State Supts. for latest changes.

State Uniformity in Text-books.—Those who advocate the publishing of text-books by the state usually urge the resulting uniformity throughout the state as a marked advantage. Such uniformity, however, if it should prove desirable, can easily be secured by the bonded contract plan. But it is not at all certain that state uniformity is desirable; the only fact clearly in its favor is that parents, upon moving from one district or county into another, will not be obliged to buy new books.

Free Text-books.—Another experiment in educational economy, which is enthusiastically indorsed by states that have tried it, is that of loaning text-books to all public school pupils. It is argued that books are the most necessary means by the use of which pupils are enabled to take advantage of the state's provision for elementary education, that there is as much reason for a free supply of books as for a free supply of charts, maps, and other apparatus. The validity of this line of argument must be admitted at once; the most forcible objection to free books is on the score of expediency; can the state, or some smaller community, economically afford the first cost of the books, the cost of repairs, and of the machinery of distribution? At least one borough in Pennsylvania answered the question affirmatively in 1893, by reporting that books were furnished all pupils at an average cost of *eighty-three cents* per pupil.

(b) The Rural High School

A connecting link between primary state education and the colleges of the state is necessary to make a state system effective. Formal education must be a continuous process, and this it can not be, so far as the state is concerned, if a gap is left between the elementary schools and the colleges.

"Universal education" must be interpreted to mean universal elementary education only, unless there are facilities by which all may have opportunity to get the full measure of education offered by the state. One element of true economy consists in securing the largest returns upon an investment. The state makes a very heavy investment in college and university, and it is wasteful not to provide for bringing under the influence of these higher institutions the greatest possible number of bright young minds.

The connecting link between the elementary and the higher education is the high school, and to its advantages the children of the country have as clear a title as the children of the city. This fact is recognized in several states,¹ and township high schools are provided for by law, to which graduates from the elementary schools are admitted, and the graduates from which may in turn enter, upon diploma or certificate, the freshman classes of the higher state institutions. The expense of the rural high school is borne by the township as a whole, or by tuition fees paid by the district for each common school graduate attending from that district.

County High Schools.—In states where the county, instead of the township, is the unit, there should be maintained a county high school. Part of its support should come from a county tax and part from fees paid by each school district for the pupils it has in attendance.

In most instances, the larger towns of a county have fairly well organized high schools, and economy demands that arrangements should be made with these for admitting the graduates of the elementary rural schools. The

¹ See especially the School Laws of Mass., Vt., Conn., Ohio, Minn.; also *The School Review*, Vol. 8: 213, 335; 12: 148, 267; Report of the Nat. Commissioner of Ed. '99-'00, 1: 643.

question of transportation of pupils, already mentioned on p. 141, is intimately bound up with that of rural high schools. When both questions are answered properly and together, the country boys and girls will find a broad and open highway from their doors to the state university; and this is undeniably their right.

(c) The College and University

The closing sentence of the preceding paragraph assumes that it is the business of the state to provide the higher education, and the assumption has perhaps sufficient support in the fact that in nearly every state is found at least one institution of collegiate or university rank, sustained at public expense. The character of advanced state education and the limit of the state's duty in providing it, are matters by no means settled and it is not proposed to discuss them here, the present concern being with the question as to what is the place of higher institutions in a state system, and how they shall be correlated with other parts of that system.¹

Position of the College.²—The college is to-day in danger of losing its distinctive character, through both the encroachments of the high school, and its own ambitious attempts at work properly belonging only in the sphere of the university. But a strong reaction from this abnormal condition is now making itself felt, and the college will doubtless soon take its rightful place between the high school and the university. In a complete system of schools, there is where it should be and discharge

¹ "Care and Culture of Men," (Jordan) Whitaker & Ray Co., San Francisco.

² "Opportunity of the Small College," *Atlantic Monthly*, 87: 763; "The American College in the Twentieth Century," *Atlantic Monthly*, 85: 219; "The Encroachment of the College Upon the University," *International Monthly*, 3: 634; "Differences Between the College and the University," *Educational Review*, 8: 26.

its distinctive functions without having them encroached upon by the high school and without trying fruitlessly to ape those of the university.

If a state is too poor properly to establish and maintain a university, and most states are, then it would be simple wisdom and economy to make the highest state institution a real college doing thoroughly the work of a college and *that only*.

If the state can and does properly support a state university, economy does not necessarily demand that all the higher educational work, that of the college as well as that of the university, shall be under one management and at the same place. In either case, whether the state undertakes only the work of a college or assumes also that of a university, the fact must be clearly kept in view that at least one purpose of a college is to prepare its graduates to undertake, if they choose, a university training. The college should receive the graduates of the high school and pass them on, if they desire to go, to the university; no one of these three educational agencies should do the work of either of the other two; in a state system there should be no waste of time or loss of work already done, in passing from one institution to another.

Voluntary Systemization of Schools.—There are many schools working on private endowment and having no connection with the state except through their charters. The largest universities of this country, the denominational colleges, and a host of private secondary schools belong to this class. It would be great economy not only to the individual school but to the whole work of education in the community, if these institutions should, in any given state or group of states, form a voluntary association whereby their work could be simplified and systemized.

Colleges quite commonly accredit the work of secondary schools under certain conditions, and universities usually accredit the work of denominational colleges of established grade. But such arrangements have heretofore been with a view to increase the clientele of some individual college or university rather than to effect any systematic inter-scholastic organization. But in 1900 the institutions represented in the Association of Colleges and Preparatory Schools of the Middle States and Maryland agreed upon a plan of uniform requirements for entrance to college that practically binds these institutions into a system. In accordance with the plan adopted by that Association, uniform entrance examinations are held simultaneously at different points by examining boards, whose certificates are accepted at their face value by the colleges concerned. A similar association has been formed in the South.

Affiliated Colleges.—Several years ago a plan for affiliating private colleges with the state university was outlined before the State Educational Association of Missouri.¹ It received but little notice there or elsewhere, but deserves careful consideration as a possible means of freeing the university from the necessity of so much undergraduate work, and of closely and economically correlating the service of all the higher institutions in a given state. Briefly, the plan provides for such a voluntary association between private colleges and the state university as shall enable the university authoritatively to lay out and supervise, in essentials, the courses of study offered by the colleges; and it further provides for the recognition by the university of graduates of these colleges, so that a graduate would be known as a

¹ Report of Nat. Commissioner of Ed. for 1891-2, p. 753, *et seq.*

“Bachelor of Arts from ———— College of Missouri University.” This method of combining the educational institutions of a state has much to commend it to the attention of educational economists.

(d) The Professional Training of Teachers

State Schools for Teachers

The term “normal” is not properly applicable as a distinguishing adjective, in any of its meanings, to schools whose aim is the training of teachers. It implies a difference that either does not exist or should not exist. If the training school does academic work (as it must and should) and the word is used to describe the methods of teaching and studying subject-matter, then a condition is implied which should not obtain. The subject-matter of academic studies should be taught as “normally” in the high school or the college as in a teachers’ training school. If the teachers’ training school assumes academic equipment on the part of its pupils, and does only professional work, the term “normal” is no more applicable to it than to a school of law, or medicine, or theology. Space is taken here to say thus much, both because the word is a misnomer, and because it has, unfortunately, fallen into serious disrepute.

Schools maintained for the training of teachers are necessary to a state system of education. The state should no more depend upon private training schools in this matter than the nation should depend wholly on volunteers in case of war.

It is true, even in those states having the most and best equipped teachers’ training schools, that comparatively few teachers have had the training which these schools afford. But they serve to leaven the whole lump

and to raise the standard of requirements for certification.

If any state had the courage to say that, after a certain time, no one should teach in the public schools who had not had at least one year's successful study in a state teachers' training school, and that the higher positions could be secured only by graduates of such a school, the best of those who desire to teach would quickly meet the conditions, and in sufficient numbers.

*Teachers' Institutes*¹

Teachers' institutes have done a great deal of good and are destined, as they improve, to do a great deal more. They also, like most other educational agencies, afford many opportunities for waste.

The whole subject of rural school conditions and the means of improving them has only recently received any serious and wide-spread attention from educational students and reformers, and the teachers' institute has suffered neglect accordingly.

State Control of the Institute.—It is not wise for the state or its agents to declare specifically and in detail upon what topics and subtopics instruction in an institute shall be given, as is the case in Kentucky and Wisconsin for example. The State Board of Education should have power, however, to lay down the general lines along which institute work should be directed, and should have the discretion to make these lines broad enough not to hamper the work of well equipped instructors.

In Mississippi, Wisconsin, and some other states, the state educational authorities may call a convention of professional institute instructors, for the purpose of reaching

¹ Report of National Educational Association for '97: 301; Circulars of Bureau of Education, Washington, No. 6, 1888, and No. 2, 1889.

a common basis and method of work. Such a convention, under proper guidance, can do great good and be the means of real economy. However, unless the institutes use only "home talent," some instructors would not get the benefit of such a convention; but it is never wise for any phase of school work to be administered wholly by home talent; no state lines should be drawn against educational competency.

Other states, as Illinois and Kansas, license institute instructors and thus, in some degree at least, protect their teachers against the inexperienced and the ill equipped.

Organization and Methods of the Institute.—An institute, to be worth while, should continue through not less than three days; if it can last for ten or fifteen, so much the better, other things being equal.

The chief object of such a meeting is to give to the whole corps of teachers professional inspiration and uplift. To attain this, an instructor must be had who himself has inspiration and power; the mere "method monger" can not serve here.

But another object is to give the teachers, particularly the inexperienced, specific help and direction in the organization and management of a school and in the fundamental principles of method. The failure to attain this object is the chief reason why so often teachers go away from an institute feeling resentfully that it has been hazy and unprofitable. The specific work in management and method is needed to anchor the inspiration. If the same instructor can give both, well and good; if not, enough instructors must be employed to accomplish these two chief ends of a teachers' institute.

If an institute enrolls a large number of teachers, it may profitably be sectioned into at least two groups, the

first made up of those who have had only a year's experience, or none; the second made up of all the others. All the teachers should meet together once or twice daily to hear the general lectures, but the teachers in each section should be given the technical instruction they especially need.

It is hardly necessary to say that, unless the institute continues two weeks or longer, no academic instruction should be attempted, except incidentally and for purposes of illustration.

Where there is enough money, much that is cultural can and should be provided for the teachers during an institute. Popular lectures and popular music should be prominent features.

The tendency of legislation is in the direction of requiring teachers to attend institutes and paying them for such attendance.

Taking Notes.—Teachers would receive far more benefit from the institute than is commonly the case if they would make more use of the note book. In the brief time of an institute it is hardly feasible to do any class work, and therefore the lecture and the "round table" conference must be used. The value of these to the individual teacher lies largely in his ability to take notes; but the average teacher will not take notes, as a rule, unless specially induced to do so. It rests with the county superintendent to find the sort of "inducement" that will prove most effective.

The Institute and the Public.—The institute should be made one of the points of contact between the schools and the public. All general lectures upon educational themes should be free to the citizens of the community where the institute is held, and effective use should be

made of every opportunity thus offered to show the public what are present educational ideals and aims and what is being done to realize them. The "County Exposition" (see p. 60), which should be a special feature of the annual institute, is a most valuable means of arousing public interest in the work of the schools, because it is objective and shows concrete results.

Teachers' Associations

In this country teachers' associations are, for the most part, voluntary and unofficial. But they constitute one of the best means of quickening the professional spirit of the teachers, a spirit of comradeship in a common work and a feeling of pride in doing that work well, and they therefore have an important function in the unification of a state system of schools. In addition to the advantages just named, the county association may follow the example of the national association and do somewhat to enlarge the sphere of the professional in education by well conducted investigations and experiments. Surely no one has a better opportunity for investigation of educational problems than the country teacher; his school-room is a well stocked laboratory. One of the regular features of the county and state meetings of educational associations should be concise reports of the conditions and results of certain experiments in management and method. It would be difficult to find a better way than this of fixing the attention of the teachers upon the central problems of their work.

Too often the meeting of a teachers' association is given over to entertainment features and lectures from outsiders. But however good the music and elocution may be, and however excellent the talks of the imported educator, it must not be forgotten that the law of self-

activity is the law of growth and applies to a body of men and women as well as to an individual. The "pouring-in process" is but little better in a meeting of teachers than in a school. The conclusion is that the teachers themselves should take an active part in the work done at county, district, or state meetings.

Association for Protection.—In Great Britain, one very important function of the National Union of Teachers is to protect the members by securing the enforcement of laws. This function has not been assumed in this country, except in a few local instances, by any educational association. Yet, the protection of teachers against the ills they are liable to suffer through public indifference and the selfishness of politicians or employing boards is one of the important benefits to be secured by organization.

Not only is it feasible for teachers, through their associations, to secure protection by enforcement of laws already existing, but they could also successfully influence legislative bodies to the enactment of laws favorable both to teachers and to the progress of education in general. If a few leading teachers in each state should start the organization of a teachers' federation or league the result would appear in a greatly increased efficiency of school work. Wages would be better and more stable, certification would be more uniform and of a higher standard, stronger men and women would therefore be drawn into the profession, and the weak and inefficient would be forced to seek other work. These statements have been fully verified by the work of the "Ohio Teachers' Federation," organized in 1902.

Libraries and Reading Circles

In every state provision is made by law for libraries for the use of teachers. Every county (or township,

where the township is the unit) should maintain a teachers' library made up mainly of professional books and periodicals. This should be the case even in states where there are good traveling libraries.

Use of the Library.—It should be made by law a part of the duties of the county superintendent to take care of this library or have it taken care of; and he should endeavor in every way to keep the reading matter in active circulation. Lists of new books ought to be posted, and published in the local papers; teachers should be referred to the library for material to use in the meetings of their association; the superintendent should call the attention of one or another teacher to a book or article which he believes would be helpful in any particular case. The careful, thorough use of a well selected library, under the sympathetic direction of a superintendent who knows both the books and his teachers' individual needs will show marked results in improved management and teaching throughout the county.

Organization of Reading Circles.¹—Usually the state teachers' reading circle, like the associations, has a purely unofficial and voluntary organization. The state teachers' association elects a Board of Control, and each county association elects a local manager or secretary. Some very excellent work has been done under such voluntary organization; but there is no doubt that more work, and more effective work, would be done if the state would take some authoritative part in the management of the reading circle.

Although professional spirit and a desire to improve ought to be sufficiently strong incentives to bring every teacher into the reading circle work, yet it is the fact that

¹ See Report of Nat. Ed. Association of 1890, p. 325.

a much stronger one is such credit for the completion of a course, as shall raise the grade or rank of the certificate. Such credit ought to be given for completing a definite amount of reading, but only under the watchful direction of the state. Hence, it seems clear, the reading circle work ought to be under the management of the State Board of Education, which should select the books, prescribe the amount of reading, fix some sort of test to ascertain whether the requirements have been met, and issue certificates of credit that the holder may present to a local examining board when applying for a certificate.

Too many teachers read the adopted books because it seems to be the thing to do, but never make any attempt, apparently, to bring the work of the school room into relation with what they have read. To correct this evil, a place ought to be given on the monthly association program for a round-table discussion of the matter read during the month, and members should be required to report on the *practical use* they have made of facts and principles gathered from their reading. Also, if the local supervision is close and effective, superintendents and inspectors will see that the teachers do apply in their work the best that has been learned from their reading.

Results that are worth while can hardly be realized from reading circle work unless some such plan is followed as that outlined in the preceding paragraph. The reading, done largely by immature young people, will be desultory and aimless.

(e) State Control of Private Schools

There are several problems, still unsolved, or at least not everywhere solved alike, which touch more or less closely the whole question of the organization of educa-

tion as a part of the state's business. These can be but little more than stated here.

Shall the state permit anyone to open a school, who secures a charter as for other private business? Or does the state owe to the young citizen who seeks schooling some sort of protection against educational quacks, as it gives protection against medical quacks?

Control of Degree-conferring Institutions.¹—New York and Pennsylvania do not permit any institution to confer degrees unless it has an endowment or total holdings of \$500,000. Efforts in the same direction have been made in a number of states farther west, but have failed, through popular protest. An academic degree has a certain public significance and commercial value, and surely the state would be quite as right in protecting this value as in protecting, for example, the makers of honest butter.

Excellent teaching, however, can be done on less than \$100,000 endowment. It is coming to be frankly recognized that often better work is, in fact, done in some of the smaller and poorer institutions than in the larger and richer; witness Jena, to take a case away from home. Therefore the money test does not seem the best to apply when the state is seeking to determine what institutions may have legal permission to grant degrees. There is but one safe test, and that is the test of *results*. Let the state establish any *standard of work* it may choose, determine in what way results shall be measured by that standard, charge the State Board of Education with the duty of carrying out the law in the case, and then grant the authority to confer appropriate degrees to all institutions conforming to the established standard.

¹ Report of N. E. A., 1897: 701.

Control of Elementary and Secondary Schools.—The discussion of state control of private schools has been mainly concerning degree-conferring institutions; but there is greater danger in the uninspected work of elementary and secondary schools conducted as private enterprises, than in cheap degrees.

It will doubtless be a long time before public opinion will come up to the level of a law against the opening of a private school by anyone who can hire a room and find pupils to put in it. But the common sense of the matter seems to be that if the state assumes, as it does, the right to educate, it should fix the standard of education and require all schools to conform thereto. The state can not forbid private schools, but it can justly exercise authority in establishing standards to which *all* who teach shall conform.

(f) Pensions for Teachers¹

In several of the larger cities in this country there are voluntary benefit associations of the teachers, which pay a specified sum to members who are ill a certain length of time, and, in some instances, pay an annuity after a long term of service or in case of total disability. Such organizations do not differ in principle from similar ones in any class of work. But in a few states these teachers' benefit associations are organized under special laws, and each teacher is assessed a small per cent of monthly salary in order to supply the benefit fund. California provides pensions for all teachers who accept the provisions of the state law creating a retirement fund by reserving one per cent of the salary, and who shall have become incapacitated after twenty years of service.

¹ Reports of Nat. Commissioner of Ed., 1894-5, 1: 1079; 1895-6, 2: 1343; 1898-9, 2: 1478.

To such a law as this, or to voluntary benefit associations, no objection can be offered. But to reserve any part of a teacher's salary without his consent, as was formerly done in the larger cities of Ohio, or to create a pension fund by state appropriations, as is suggested in several quarters, is a wholly different matter.

It is an open question whether the state or anyone acting by its authority, has a right, under any circumstances, to take from the teacher a part of his salary to go into a general teachers' benefit fund. This is compulsory insurance, and also involves the wider question of civil pensions, against which the sentiment of this country has so far been strong.

B. THE CITY SYSTEM

(a) The Board of Education¹

Selection and Organization

It is the earnest desire of every friend of American schools that they should be free from political partisanship, nepotism, and all other forms of "pull" and "graft." It is worth every effort to keep boards of education free from these taints. Various experiments to this end have been made, of which none has proved wholly successful. Those yielding most favorable results indicate the following as necessary precautions in the selection and organization of boards of education: (1) the board should be small, consisting, even in the largest cities, of not more than fifteen members; (2) there should be some sort of qualification for membership, based upon either property or intelligence, or upon

¹ See "Report of the Educational Commission of Chicago" (1899), Chicago University Press; New York Independent 56: 416; "School Administration in Municipal Government," (Pollins) Macmillan Co.

both; (3) the term of office should be long; (4) the selection of members should be by election at large, instead of by wards.

Size of the Board.—A city board of education is an executive, rather than a representative and deliberative body. It should, therefore, be small so that business may be dispatched quickly and smoothly. The tendency in this country to make such boards elective and, like other elective bodies, representative, has resulted in making them too unwieldy, in many instances, to do rapid and effective work.

Qualification of Members.—Persons who are to be responsible for a proper expenditure of money in so important a matter as the schools of a community should be required to show some special fitness for the trust. They should be persons of business capacity, as evidence of which they should be owners of property, to a certain amount, *in the community electing them*. They should also be resident householders in the city whose educational interests they are to serve.

The Term of Office.—"Short terms and rotation in office" is another popular political phrase that has no valid application to the administration of a system of schools. It would be well to have a six-year term of office, with elections only every two years, at which a number equal to one third of the total number of members should be chosen; and members should be eligible to reëlection. A man or woman who renders efficient and unselfish service as a member of the board of education should be given an opportunity to render that service to the community so long as he or she is willing to do so. There could be no objection to such an arrangement, if the people would understand, and act upon the knowl-

edge, that the schools must never be used for political or personal exploitation.

Mode of Selection.— In some communities it has been found that appointment by the mayor, or other responsible official, gives better results than election by popular vote. But any argument that is valid against the popular election of members upon a board of education is equally valid against the idea of democratic government. The American ideal is that the people shall choose those who are to do the people's business. If the popular selection of a board of education should conform to the following general plan there would probably be a minimum of evil in the results: (1) candidacies to be announced and members to be selected upon educational issues only; (2) the names of candidates to be proposed by some definite number of property owners and householders; (3) the election to be at large, and not by wards; (4) the voting to be at a special election, if possible, so that "politics" may be minimized.¹

Salaries.— The question as to whether members of a school board should receive salaries is not at present a very pressing one. The weight of custom and theory is against it; and in only one city, San Francisco, has payment of large salaries to members of the school board been tried. The results there are too indecisive, apparently, to tempt other cities to a like experiment.

Organization.— Following each election of members, the board should organize by putting one of the newly elected members in the chair, to serve there for one year. The experience of older members is more valuable on the floor than in the chair. The board should be permitted, under the law, to elect a salaried secretary, and, in large

¹ See *Educational Review*, 20: 69, and 13: 232.

cities, a salaried business agent, who should be required to give bond.

The fewer committees there are, the better. The following are enough, namely, one on finance, as an estimating and auditing committee; one on buildings and sanitation; and a third on complaints and petitions. The whole board should serve as a committee on appointment of teachers, arrangement of courses of study, and selection of text-books, but in these matters should have only advisory and confirmatory power, the responsibility being left to rest upon the superintendent.

Functions of the Board

The functions of a board of education should be mainly financial and directive. It should appoint its agents, confirm subordinate appointments made by these agents, receive bequests, and hold and dispose of property in its corporate name.

Among a board's most important powers should be (1) levying a school tax; (2) exercise of the right of eminent domain in the acquirement of school sites; (3) defining in a general way the regulations of the schools, the duties and responsibilities of school officials, and the content of the course of study.

Levying Tax.—In some instances a school board has the right to levy the school tax direct, without regard to the city council. In others, the board can hand in to the council an estimate of the sum necessary to sustain the schools for a year, and, if this sum does not exceed that which can be raised from a certain percentage of tax upon the property owners, the latter body is required by law to allow the estimate. This arrangement is usually found to be more satisfactory than the first, as it eliminates conflicts of authority.

Eminent Domain.— One of the most important recommendations of the Chicago Educational Commission was that a city school board should have the right of eminent domain, whereby to acquire land upon which to erect school buildings. This is especially desirable in the larger cities where population is congested, and real estate owners are loath to sell. The necessity for giving to a school board the power to purchase land by condemnation proceedings becomes more and more evident as it is more clearly realized how much location and floor space have to do with the health, comfort, and good work of the pupils.

Regulations.— The regulations under which any business is administered should be as few and as simple as possible. In the case of a system of schools the only rules needed are such as define in the broadest terms the responsibilities of the superintendent and his corps, the duties of the janitors, and the adjustment of such special matters as may be dependent upon local conditions. The policy of the board should be to outline broadly the work of the employes, and then to allow them great freedom in attaining the results for which they are held responsible.

The Courses of Study and Text-books.— The relations of the school board to the courses of study should be of the most general character. The board should, because of lack of expert knowledge, do no more than determine, in consultation with the superintendent, the general subjects to be taught in the schools. To the superintendent and his corps should be left the details of arrangement and the methods of teaching.

The same attitude should be taken by the board with reference to text-books. The board's duty is simply to protect the users of the books against too frequent

changes, and against too high prices. Beyond this, the selection of books should be left to those who will teach from them.

(b) The Superintendent

Qualifications.—The prime requisites which a school board should find in the person it proposes to elect to the superintendency are successful experience in graded school work, executive power, eminent scholarship, broad culture, and proved character.

A superintendent should have at least a college education, and should be endowed with forceful and magnetic personality.

Term of Office.—It is well to elect the superintendent for one probationary year, and, if his work is good, to reelect him for a second trial year. If his service improves during the second year, he should then be elected for an indefinite term, under a contract terminable on the part of the board only upon proved charges of unfitness.

Privileges and Responsibilities.—The superintendent should be privileged to select his principals and teachers, subject to confirmation by the board. It would not be wise to place the selection of the teaching corps wholly in the superintendent's hands, and it is even more unwise to have the appointment of teachers entirely under the control of the board. A safe balance between the two dangers may be formed by giving to the superintendent the power of *nomination* of teachers, and to the board the power of *confirming* nominations.

To the superintendent also, as an educational expert, should be left the details of the course of study, the assignment of work to individual teachers, and the methods of instruction. The superintendent should be rigorously

held responsible for the *professional* efficiency of the schools, and it is just to place responsibility only where there is commensurate freedom of action.

The selection of the books and apparatus by which the teachers are to carry out the course of study should be left to the superintendent and his corps of principals.

The fact should be carefully borne in mind and constantly carried into practice, that the board's concern is with the business side of school affairs, and the superintendent's concern is with the successful working of the schools as educational agencies. He should be able to infuse vitality and coherence into the system as a whole, and be able to inspire his teaching corps with an enthusiastic willingness to work in the execution of his large plans.

(c) The Principals

The qualifications of a principal should be the same in kind as those of the superintendent, namely, sound scholarship, the training of experience, and a positive and attractive personality.

The place of principal should be made as secure as that of superintendent, the same precautions having been taken to test fitness.

By the same reasoning as in the case of the superintendent it seems clear that the principal should be consulted in the selection of the teachers for the school of which he has charge. The superintendent should pay close heed to the recommendations of the principal as to the fitness and unfitness of teachers.

Should Appoint Janitors.—It has been suggested, and with excellent reason, that with the principal should be left the selection of the janitor, subject only to confirmation by the board of education. Such an arrangement

would still further lessen the temptation and opportunity of the board to use the appointing power for political or personal ends. The janitor is so large a factor in the comfort and health of a school, in the preservation of order and decency, and in the smooth running of school affairs, that it is of the utmost importance to secure such harmony between him and the principal and such willingness of service, as can be obtained only by having the principal exercise both immediate and final authority over him.

Constitute an Educational Council.—The principals, in all but the largest cities, where district superintendents are needed, should constitute the superintendent's professional council. Acting with him they should initiate and carry out such plans as will best economize time, teaching force, and pupil energy.

Although the principals have to deal more with details than the superintendent does, yet they also should leave to the teachers the largest possible measure of individual liberty. After principles have been laid down and the ends to be reached have been defined with needed particularity, the teachers should, for the most part, be allowed to apply these principles and attain these ends in their own way. Originality of work not only should be allowed but should be sympathetically encouraged.¹

(d) The Teachers

The difficulty which, more than any other, blocks the efficiency of the public schools, is that the people do not realize the need of teachers who *can teach*. And the reason for this is found in the fact that there is not and

¹ Refer to Report of National Educational Association, 1901: 280, *et seq.*, and to the Superintendents' Round Tables in other issues of the Report; Also to the files of the American School Board Journal, Milwaukee.

can not be any accurate measure of results of teaching and in the further fact that these results may so easily be vitiated, or improved, by agencies and influences wholly outside the teacher's control. In consequence, people have fallen into thinking that anyone who can pass an examination can be a teacher, and so, since all certificated persons are alike as to teaching ability, why not let the needy girl, the struggling youth, the poor widow, the superannuated clergyman, or the sons and daughters of the local politicians have the places and draw the pay? Why not carefully keep the places for "home talent?"

To help to a better condition of school affairs than that to which this state of the popular mind always leads, the law should provide (1) for the certification of teachers by expert examiners wholly disconnected with the schools; (2) for their appointment by the superintendent; (3) for permanent tenure of office; (4) for sufficient pay, and a uniform scale of salaries based upon skill and length of service.

Certification.—An examining board should be appointed by the board of education, composed of persons who are expert educators, but who have no connection with the schools whose teachers they shall examine. To secure such a board non-residents may have to be appointed, but this would, doubtless, be another advantage of the plan.

It should always be understood that the applicants for certificates may come from any place, and that health, age, scholarship, character, and skill will be the only qualifications considered.

This examining board, not the board of education, should have authority to accept diplomas or certificates

from other sources in lieu of the results of its own examinations.

Appointment.—As said in a previous paragraph, the teachers should receive their appointment from the superintendent, who will, if he is wise, take counsel of his principals and of others who can help him make good selections. His interest in making good appointments is both professional and personal, and is much deeper than that of the school board could be. His ability to judge of an applicant's fitness for appointment, although by no means infallible, is far superior to that of the board.

As said above, however, a balance should be maintained by leaving in the hands of the board the privilege of confirming or rejecting the superintendent's appointments.¹

Tenure of Office.—The public school teacher who does good work should be secure in her position. After one or two years of probation under close supervision, if the result of the trial is satisfactory, the teacher's tenure of place should be made permanent; which means, at least, that she should not be subjected to a yearly election.

Scale of Pay.—To-day sociologists are urging the claim of the hand laborer to a wage not based upon mere supply and demand in the labor market, but upon the laborer's needs and rights as a man. Such a claim could be far more strongly urged in the case of the teacher, who deals with the things of the spirit, and who must spend money constantly upon self-enrichment and the means of intellectual and cultural growth, in order to give good service to the state. The teacher must receive not only

¹ Every applicant should be required to present a physician's certificate of physical fitness.

" a living wage " but one that may also buy food for the soul.

As in other occupations, so in teaching, the pay should be proportioned to skill, capacity, and length of service. Under such an arrangement, a successful primary teacher might receive better pay than a high school principal.

Some day the fact will be realized by the real employer, the public, that the best teachers that can be secured should be placed in charge of the lower grades and paid *handsomely* for laying sound and safe foundations.

Another reason for more liberality, which is the truest economy, in the payment of teachers, is found in the rapidly growing demand for *men* teachers in the grades, and, under the present organization of society at least, more money must be paid in order to secure men teachers.

The Teacher's Liberty.—The need of allowing to principals and teachers great liberty in the carrying out of general plans has already been more than once suggested. It can not be too often affirmed. Those who do the actual work of teaching should be allowed the greatest possible freedom for the play of *personality*, the strongest force with which a teacher can be endowed, and should be held accountable for results. There can be no sound objection to allowing teachers also the liberty of suggestion and criticism. The same good results may be expected from the allowance of such liberty in a school system as in factories, and in the latter the results have always been good, when the employes have been invited to make suggestions looking to the increased efficiency of the plant.

The grade teacher sees things from a view point which

is in the nature of things more intimate than that of either principal or superintendent. She is, therefore, in a position to give intelligent and sympathetic criticism of the inner working of the schools, and should be invited to do so candidly.

Such criticism and suggestion may sometimes be offered in the general teachers' meetings, or to the principal or the superintendent as opportunity is given. But, to secure unreserved frankness, written and *unsigned* criticisms should be permitted. If the right spirit is shown in the matter by the principal and the superintendent, there need be no fear whatever of anonymous malice or scandal mongering.

(e) School Visitors

One of the best recommendations made by the Chicago Educational Commission was that the mayor of the city should appoint a committee, or committees, of citizens who are in no way connected with the schools, and whose business it should be to visit and carefully to inspect the schools, reporting results to the board of education.¹ Such a committee, made up of intelligent and responsible citizens, examining the material equipment and work of the schools, judging of these from a standpoint outside of the school system, and reporting its observations and conclusions directly to the school board, would be of the highest service to public education in any city. The plan of a committee of this kind has been proposed for Boston also, and is already effective in New York and in Atlanta. In the latter city the committee of visitors is made up wholly of women.

(f) The City Teachers' Training School

The pressing need of a sufficient supply of trained

¹ See Report of Chicago Educational Commission, p. 167.

teachers in the larger cities has led to the establishment of the teachers' training school as an integral part of the city school system. The wisdom of this is open to question. Even granting that the training given in these schools is all that could be desired, still they must tend to strengthen the general demand that "home talent" be given preference when teachers are to be employed; and they tend, further, to an educational "in-and-in breeding" that is very undesirable. The city's schools, like its other enterprises, public and private, should draw to their service the best intelligence and skill from every quarter, and nothing should be permitted to stand in the way of getting the best.

The teachers' training school will doubtless, for several reasons, continue to be a part of the school system in every large city, but its disadvantages should not be lost sight of, and it should be used rather to maintain a certain standard of fitness than merely as a source of supply. It should be made to feel the sharp competition of state teachers' training schools, and college departments of education.

(2) THE CURRICULUM

A few years ago courses of study were administered without any particular question about them. The curriculum for each kind of school, elementary, secondary, and higher, was single and definite. Now, even the elementary schools are coming to vie with one another in variety of studies and diversity of courses. The curriculum is the one most discussed thing in school economy to-day.

It will facilitate the treatment of the subject if some basic principles can be formulated and adhered to. These principles should be valid for all phases and modifications

of formal education, private or public, elementary, secondary, and higher.

A. MAKING THE CURRICULUM

(a) Principles Fundamental to the Curriculum

Definitions Involved.— Education has been classed as *formal* and *informal*; and the formal phases of it as formative and reformative. The question here is with regard to formative education; but it may be said at this point that modern reformative educational influences are more and more closely following the methods of formative education.

Formal education is a process tending continually toward the realization of its highest aim — *the happiness of the individual in the betterment of the social whole*.¹

The curriculum and its administration are the chief factors in this process.

Too Much Individualism.— Plainly the demand so insistently made up to times quite recent, that teaching shall be individual, has been misinterpreted and the efforts made to meet it may easily do harm. The demand originated in a realization of the inadequacy of mass teaching, handling children in large groups and all alike, and so failing to recognize and reach the personality of each. But the matter of individuality was so emphasized that the sociological ends of education were lost sight of, and one result has been individualism gone to seed and ripening as selfishness. Only psychologically is the curriculum for the individual; sociologically it

¹ N. Y. Teachers' Monograph, Oct. 1901, pp. 1, 110, 120, *et seq.*; Fouillee's "Education from a National Standpoint"; LeConte's "Evolution and Education," Ed. Rev. 10: 130, *et seq.*; Guyau's "Education and Heredity," Contemporary Science Series; Young's "Isolation in the School," University of Chicago Press; Dewey's "The School and Society," University of Chicago Press.

should be altruistic and civic. The course of study must reveal to the pupil the material and social world in which he lives, and his own relation to it, making clear his duties and privileges and holding up before him *service* as his highest and most permanent ideal. It is now demanded that schools shall not merely give information, but shall make society. Upon precisely this idea of the *socialization of the individual* hinges one of the latest phases of educational discussion.

The Curriculum both Sociological and Psychological.—So much being true, the curriculum must embody the things that will best develop the individual as such, and also fit him for his functions as a social factor. This is to say that the curriculum must be planned both psychologically and sociologically.

In the laws of social growth and in the modes of the individual's contact with society, as well as in psychology, must be sought guidance as to what shall constitute the curriculum; in the laws of physical and mental growth and in the modes of the mind's activities must be sought the ways of fitting the curriculum to the individual.

Justification of Public Education.—Before it is determined what shall be the subject-matter of the course of study the question must be answered, as far as public education is concerned, "What justifies education at public expense, what is the excuse for levying this heavy tribute upon the public purse?"

There can be but one answer to this, and that is, "The state has no right to undertake the work of universal education except as a measure of protection, perpetuation, and improvement to the state; the product of public education must be good citizenship." If this answer is true, it is true for all grades of schools and applies with

equal force to the public kindergarten and to the state university.

The Unity of Educational Processes.—To work in conformity with the principle here laid down will be to bring into harmony and coherence with one another, about a common core of organization, the curriculums of the several schools in a state system. And if the state is to supervise private schools, they also will have to adopt the same principle as vital to the right doing of their work. Dewey rightly says,¹ that the problem of the curriculum is first intellectual and then practical, and that “intellectually what is needed is a philosophy of organization, a view of the organic unity of the educative process and educative material, and of the place occupied in this whole by each of its parts.” To hold steadfastly to this idea of the “organic unity of educative process and educative material,” the oneness of the curriculum through school and college, is to be saved from the confusion now found in the relations of the elementary school to the high school and of the high school to the college. Neither will be thought of as solely preparatory to or dependent upon the others, but each will be rightly related to the other through the relation of all to the common purposes of education. If each faces the social highway along which its students must travel, then each will be rightly oriented to the others.

On this subject of the oneness of “educational construction” President Eliot has said:² “. . . I wish to affirm and illustrate the proposition that the chief principles and objects of educational reform are quite the same from beginning to end of that long course of edu-

¹ *Educational Review*, 22: 47.

² *Educational Review*, 8: 210.

cation which extends from the fifth or sixth to the twenty-fifth or twenty-sixth year of life."

What is Good Citizenship?— Before making up a curriculum which shall conform to the requirement just given, it is necessary to determine what are the elements of good citizenship.

One mark of a good citizen is that he renders to the community a just equivalent for all he receives from it. He must not do less; he may do more. He has the capacity for productive labor of muscle or mind, and sufficiently strong motives to impel him to use it. No matter how good a man may be as an individual, he is not a good citizen unless he is able to make an honest living for himself and for those dependent upon him. He is neither a good man nor a good citizen if, having capacity, he is too lazy or too dishonest to apply it rightly, and undertakes, whether as a beggar, a thief, or an idle millionaire, to get a living, and more, from the community without giving equivalent service.

But a man may come up to the full measure here indicated, and still fall short of the best citizenship. *Another mark of a good citizen is that he shall gladly do somewhat for the community without expectation or desire for personal return;* there must be a willingness to spend self in order to add to the sum total of help and happiness for humanity.

All that has been said in the attempt to define the good citizen applies to the woman as well as to the man. A woman's service to the public may be the same as a man's, or it may be different; her highest service unquestionably is different. But if the community is richer, materially or spiritually, because she lives in it, then the woman is a good citizen, otherwise not.

The Substance of the Curriculum.—In the light of the conclusions so far drawn, the curriculum of the public schools must contain wherewith (1) to cultivate in the young citizen a capacity to do something the world needs done, and (2) to stir his ambition and strengthen his will to do it. Whatever else the curriculum contains, it must provide for equipping those upon whom it is wrought out with the ability *to work* intelligently and skillfully, and the teaching must fill them with a sense of their profound *obligation to work*—to work not merely with the purpose to make a living, but *to serve the social whole*.

The content of the curriculum, that is to say, its substance, must provide knowledge of physical and social environment, and the means of cultivating the capacity and purpose of the pupil both to adapt himself to this environment and, especially, to adapt this environment to his own higher life, and so to the life of his fellows.¹

The Sociological Aspect of the Curriculum.

The subjects for which place must be made in the curriculum in obedience to societary demands are (1) science, (2) manumetal training, (3) arithmetic, (4) history, including geography and civics, (5) language and literature, (6) physical culture. These are the subjects which the state has a right to put into the curriculum of its schools for purposes of utility and self-protection.

Science.—One phase of man's progress in civilization is measured by his ability to discover and use the facts and laws of nature. In proportion as he reduces all phenomena of the inorganic and the organic worlds to

¹ See "Education as Adjustment," O'Shea; "The Psychic Factors of Civilization," Ward; Eliot's "Educational Reform," pp. 151, 303; Hanus's "Educational Aims and Educational Values," pp. 1, 43.

order and law, he emerges from the darkness and paralysis of superstition. The men who have gained the keenest insight into the processes of nature and have most succeeded in reducing these to formulas have done the highest material and, in many cases, also the highest spiritual service to mankind.

The child, therefore, as a factor of constantly increasing value in the social whole, must be made acquainted with his material environment and its basic laws

Two good results to the social whole, to mention no more, of the right use of science in the school curriculum, especially in the elementary and secondary schools, are (1) the increased contentment of the country dweller to remain in his environment, using and enjoying it; and (2) the introduction of a centrifugal force into congested urban centers, by showing people how farm and garden and forest may be made to pay in both money and health.

Manumental Training.—The term “manumental” is used in order to emphasize the fact that the real function of the manual training furnished by other than special trade schools must be primarily *educative*. The purpose is not merely to train the hand to work skillfully, important as that is, but to reach the mind through the training of the hand as an instrument of acquisition and of expression.

The term is used here also with a wider meaning than has attached to “manual.” Under it is included all forms of school work with materials of any kind, kindergarten occupations, drawing, modeling, sewing, and cooking, work in wood and metal and school gardening. “Manumental training” means *all school employments that typically represent or reproduce the material constructive and productive activities of society*.

The plainest fact upon which a sociological argument for manumetal training in the curriculum can be rested is that a very large percentage of the world's work must always be done directly or indirectly with *hands*, and the better trained the hands are the better will the work be. The professions enroll only about ten per cent of those who are engaged in gainful occupations, and of the remainder but five per cent have had any school training whereby they were specially fitted for the particular work they are trying to do. Even of the ten per cent of professional workers, there are many, surgeons, dentists, scientists, painters, and sculptors, who need for their work special skill of hand. Only within very recent years have the glaring injustice and the social waste of making more provision in the public schools for the five per cent than for the ninety-five begun to be recognized.

If, as was said above, an essential element of good citizenship is the ability to make an honest living, and most honest livings are made with the hands, then society has a right to demand that the training of hands shall be a function of the public school. Then, too, the great industries are justified in demanding as a social right that the schools shall give the alphabet of the crafts and arts, even as they have so long given the alphabet of the professions.

When it is remembered that most of the manumetal training afforded by public schools in this country to-day is confined to the high schools, and that only about five per cent of the school population ever get into the high schools at all, the necessity at once becomes evident that this form of training must have a place in the elementary schools.

Another and higher value of manumetal training in

the public schools is its democratizing influence. Instead of making class or caste differences more distinct and permanent, as was once argued by its opponents, it serves to bring the so-called superior social class into intelligent sympathy with the hand worker, and gives to the humblest pupil the self-respect and the self-confidence that invariably mark him who can *do something* skillfully. The man in broadcloth can not seem so far removed, socially, from the man in overalls if as boys the two worked at the same bench and with the same tools. No man who has worked skillfully with his own hands can ever look down upon the hand craftsman; the man who has had only mental training frequently does.

As one reads the discussions of manual training as reported in the various educational meetings throughout this country, he must be impressed by the unanimity with which the subject is handled as a sort of inducement for keeping boys longer in school. In these discussions the girls, their continuing in school, their share in social service, their adaptation to present and future environment, seem to be considered but slightly, or wholly ignored. Happily, the practice is better than the preaching, in many instances, and not a few elementary schools provide for instruction and practice in sewing, cooking, and other forms of domestic arts, while many higher institutions are at last practically recognizing their duty by offering sound courses in both the domestic sciences and the domestic arts.

General Walker has said with characteristic vigor, "America is suffering from two great curses, indigestion and alcoholism, both due to . . . the inability of the women in the middle and lower classes to prepare wholesome and nourishing food."

What particular type of constructive activity shall receive most attention in any given locality or section must depend upon the circumstances environing the school. In agricultural communities the school must help to show the intelligent, scientific side of farming; in industrial regions the emphasis may be placed upon tool work; where there are mines, attention should be paid to mineralogy and the elements of mining engineering.

Arithmetic.—Arithmetic, the art of measuring and comparing quantities, is fundamental in all societary occupations, and only in its applications to these has it any particular value in the curriculum. Both the public and schoolmen are slow to recognize this fact, and so to this day much that is archaic and worse than useless persists in the arithmetic of the schools; as often taught it deserves the name of the “Moloch of the curriculum.”

History, including Geography and Civics.—Every one in an American community has the privilege, and in this case duty is commensurate with privilege, of aiding in directing the political activities and in determining the influence of the social institutions of town, state, and nation. To do these things wisely, with economy of effort and the avoidance of costly experiment, a knowledge of what has been attempted in other times and places is necessary. A proper appreciation of the civic errors of the past, an appreciation becoming dynamic in motive and action, would prevent the continual municipal misrule so characteristic of large American cities. It is quite probable that had the generation which came to manhood and womanhood in the United States in the '50's been well grounded in Greek history and its political lessons, the Civil War might have been averted. A thorough study of four centuries of Rome might have pre-

vented the French Revolution. The civilized nations of the world, in making some recent history, have set lessons the learning of which will do away with war altogether.

But at the very core of each great world movement there is a personality ; biography is the soul of history. To put before the young the life histories of men and women who, in heroic endeavor, self-sacrifice, and utter devotion to the public good in war, in political service, in pure religion, in medical research, in social betterment, have wrought mightily for their fellows and for posterity, is to provide for the still higher and more complete socialization of human energy, for that exalted altruism which is to be the distinctive mark of the twentieth century.

Along with the history, if it is to have body and substance, must go geography. But to make history substantial by giving to each event its local habitation is only one use of geography, or, rather, is the use of but one kind of geography. Physiography and commercial geography are also societary subjects, because a knowledge of them is needed by those who are to take an active part in either the production or distribution of the world's necessities and luxuries, and is equally needed by those whose business it may be to make laws for the control of production and distribution.

Civics.—The theory and practice of citizenship is applied history, and as a subject in the curriculum should be so presented as to furnish the young citizen both with the knowledge of his duties and how to discharge them rightly, and with a noble inspiration to make his work in the community contribute richly to its higher life.

Language and Literature.—Good work in all subjects depends, of course, upon some knowledge of language.

With respect to their social value language and literature are not to be studied so much for their direct as for their indirect importance. There is nothing politically anti-septic about the alphabet; the fourth reader is no antidote for social poisons. Only lately have we begun to recover from the idea that the three R's by some inherent virtue hold healing for political, social, and moral ills.

Letters are but the vehicle of the inspiration contained in literature; except as reading leads to high ideals and conduct conformed to them, it is socially worthless or harmful.

Physical Training.—A nation rightly demands that its soldiers shall come up to a certain measure of physical fitness. A community, town, state, or nation has an equal right to demand that all its citizens be given such training as to equip them with power to resist disease and successfully to stand the expenditure of the physical energy necessary to discharge fully all their duties as citizens. If communities could but realize the wisdom of spending as much, proportionally, in producing a physically sound and competent citizenry as in taking care of defective classes and individuals, there would soon be much less need than now appears for almshouses and asylums for the insane and the imbecile. At this point sound pedagogy again makes demands upon sociology and political economy, and urges that, through the legal suppression of all forms of objective temptation to vice, the schools be given a fair chance to do their perfect work upon the young, giving them sound and wholesome bodies as well as clean minds.

The Psychological Aspect of the Curriculum.

As said earlier, the arrangement of the subject-matter of the curriculum must be psychological, following the

natural order in which the growing mind's activities manifest themselves, and so adjusted to these activities as to reënforce them and bring them to their best expression. The history and literature of education afford few examples of trustworthy inductive experimentation, in basing educational processes upon psychology, and until much inductive experimentation is done these processes must be haphazard and fall short of full fruitfulness.

Three Operations Known.—It is clear enough, however, that at the age when the child enters school the mind functions in its three operations of *acquisition*, *assimilation*, and *expression*.¹ Facts and experiences must be acquired, must come into consciousness, before they can arouse feeling and thought, and, if expression is anything more than the automatic play of sensation and motor responses, feeling and thinking must precede expression, or, as Holbrook better calls it, “self-externalization.”

The conclusion from this is that the acquisitive powers, the senses and memory, should first be given active and gratifying employment through objective work; the inherent assimilative powers, already highly active, should be directed by deft questions or suggestions (oral and objective), and the irrepressible tendency to express by speech and motor activity should be given constant encouragement and freedom of opportunity. Any given exercise in school should be so planned as to evoke all these activities, though not necessarily all in equal degree.

There should be at every stage of the pupil's progress through school life acquisitional, assimilational, and expressional exercises and studies provided in the curriculum.

¹ Roark's "Psychology in Education," pp. 155-264.

But the powers of acquisition, assimilation, and expression do not all develop in even measure at the same time. In the early days the acquisitive powers are most active; in later youth and early middle life the assimilative lead, although the acquisitive are still growing; and later still the expressive powers, if development has been normal, reach a maximum.

The application of this to the arrangement of the curriculum demands that in the elementary schools the emphasis be placed *relatively* upon acquisition of fundamental facts; in the secondary schools upon assimilational activity; and in the higher institutions upon expressional activity.

That is to say, in the elementary school the aim should be to provide the pupils with the alphabets of the different departments of human knowing, being, and doing, to lay broad and deep ground plans in the acquisition of the fundamentals of knowledge, in the formation of the moral habits, and in the beginnings of that skillful adjustment of word and deed to thought and feeling which shall mark the competent and cultured man and woman.

In the high school and college, doing their work in the adolescent and early adult periods, the aim should be so to balance freedom for the student's individual initiative with the teacher's directive and stimulating influence as to secure the most effective activity of the powers of independent thinking. The result of the work of the secondary school should be that the student "finds himself" and can stand alone, with power to use his equipment.

The distinctive function of the university should be specialization, putting the edge of *skill* upon the blade of *power*, fitting the man or woman to do easily and economically some one thing thoroughly well.

Psychological and Social Values.—In skillful hands almost any subject can be made to yield excellent results of a purely psychological value; but the facts upon which the acquisitive powers are exercised may be of no value, the combinations and relations which call forth assimilative activity may have no application to the needs of either the individual or society, and the forms of expression may be such as to unfit the individual for reacting upon his environment or for adapting it to his needs. The absurdities of the scholasticism of the middle ages bear abundant testimony to the truth of these statements.

There are subjects of deep human interest that are suffused with the beauty and glory of what the race has been and is, what it has accomplished and what it is accomplishing now; and these subjects have a right to a place in the curriculum for both sociological and psychological reasons. Of these, literature in its broad meaning, the history of other peoples, and the arts of form and music rank first in importance.

There are still other subjects which are more remotely social and more directly psychological than those just named. These may be grouped under the wide term philosophy, and their chief value lies in liberalizing, that is, *freeing*, the mind, and in making of it a more efficient instrument of work. In so far as this latter aim is reached, philosophy too becomes a distinctly social subject.

All these subjects, in their various forms, are usually called the "culture studies." It is as right that they should have places in the course of study, and largely for the same reasons, as that the schoolhouse should have beauty of architectural finish, or that pictures should hang on the walls of the schoolroom. They are psychologically valuable because they give power and poise, culti-

vate the emotions, and train the reason. They are socially valuable because they redeem society from crass utilitarianism and materialism.

Guyau, in "Heredity and Education," says, ". . . whatever is really conformable to the highest good of individual life (moral and physical) is from that very fact useful to the whole race." If this is true at all, it is true because man is a social being, and what is not good for society is not good for him as a part of society.

But it is safer to state Guyau's proposition conversely. Rather should it be said that whatever is found to be a fit subject to meet societary demands upon the curriculum can be so handled as to meet, in the main, psychological demands.

There follows a brief summary of the working conclusions reached upon this point:

Judged from the psychic and socio-psychic standpoints any subject, to deserve a place in the curriculum, must show one or more of three values, *utilitarian*, *disciplinary*, and *cultural*. It must be directly useful to the individual and to society, or it must have special power to strengthen and train some capacity or capacities of the mind, or it must prove itself a means through which may be acquired that indefinable but very real something called *culture*.

Science Has All Three Values.—Science, put first on a preceding page in the list of subjects having social significance, has all the values named above. The utility of science was the basis of its earliest claim to recognition and rank in the curriculum. But its advocates were immediately put upon the defensive by the counter contention that science is not disciplinary and especially is not cultural. It is not intended to reopen here the old quarrel

between the classics and the sciences. The sciences are in the curriculum permanently, but the results have been somewhat disappointing to both parties to the controversy. The utility of science has been demonstrated; its disciplinary power is becoming more evident daily, as we learn better how to teach it; only in its *cultural* quality does it seem to fall short of the highest claims made for it. But that it has this quality is shown by the addresses and writings of Huxley, for example, whose every utterance was marked by the lucidity, sincerity, poise, and polish that are the most important attributes of culture. Unfortunately, too many scientists and teachers of science seem indifferent to the culture value of science, or are even proud of their inability to bring it out in their teaching. When science shall have been in the curriculum for as long a time as the classics occupied first place there, and its methodology shall have been as carefully worked out, its worth as an instrument of liberal education will be manifest.

The case for the culture side of science is well stated by the editor of one of the chief literary magazines when he says: “. . . there are no other things [than science] of so far-reaching suggestiveness, no other things of such imaginative use in relation to our thought concerning questions of the greatest moment and interest.”

Manumental Training.—Twenty years ago the contention over manual training was nearly as fierce as that over the sciences. Now, as in the case of scientific study, the utilitarian and disciplinary values of manual training are known of all men; its ethical and cultural values are becoming evident.¹

¹ One of the strongest presentations yet made of the psychological value

Those who derided the idea of a "carpenter shop in the school" for the most part granted the bread and butter utility of manual training, but could see in it no genuinely educative value. It has, however, been shown that in addition to its service as a training in exactness it also in a marked degree increases general power and efficiency through its development of sensory and motor areas in the brain which would otherwise not be made to function.¹ Furthermore, the varied exercises of manumetal training afford outlet for the motor activities, which are highly important forms of expression and which under prevailing school usages are suppressed instead of being directed and trained.

Culture Value of Manumetal Training.—Æsthetic appreciation and æsthetic skill are among the marks of culture, and these manumetal training, used as it can be and should be, will always give. The *art* side of manual work is a side constantly needing emphasis. Constructive work in the school should always strive to express not only utility but beauty as well.² It is further claimed by those who have tested the matter, that manumetal training has a distinct and positive *moral* value.³

Arithmetic.—What psychological value arithmetic has in its disciplinary effects. These are much less than has long been supposed, as President Eliot has so forcibly

of manual training is that found in the series of five articles by Professor Henderson, in the *Popular Science Monthly*, Vol. 53.

¹ "Is Manual Training a subject or a method of instruction?" Ed. Rev. 27: 369; Davis, "Researches in Cross Education," *Studies from Yale Psychological Lab.*, Vol. 6, 1898; same subject, *Pop. Sci. Mo.*, March, 1900; Report of Nat. Ed. Association for 1901: 759; "From Fundamental to Accessory, etc." *Pedagogical Seminary*, 6: 25; the conclusions of these writers have, however, been called in question; see Dexter, "Survival of the Fittest in Motor-Training," Ed. Rev. 23: 81.

² Report of National Commissioner of Ed., '95-6, 2: 1321, *et seq.*

³ Report of National Educational Association, 1901: 270.

pointed out. He has said: "From one sixth to one fourth or even one third of the whole school time of American children is given to the subject of arithmetic, a subject which does not train a single one of the four faculties to develop which should be the fundamental object of education. It has nothing to do with observing correctly, or with recording accurately the results of observation, or with collating facts and drawing just conclusions therefrom, or with expressing clearly and forcibly logical thought. Its reasoning has little application in the great sphere of the moral sciences, because it is necessary and not probable reasoning. In spite of the common impression that arithmetic is a practical subject, it is of very limited application in common life, except in its simplest elements. . . . On the whole, therefore, it is the least remunerative subject in elementary education as now conducted.¹

The chief value of arithmetic, being its every-day utility, is therefore social. Of culture value it is almost wholly destitute. In spite of these facts, which have been widely recognized in a theoretical way, a pedagogically discredited arithmetic still holds its prominent place in the curriculum and in the affections of examiners.

History, with Geography and Civics.—These three subjects are grouped together because they should be taught and studied together or in close relation. History without geography has no substance; geography without history is barren and without spiritual content. Civics rests upon history, and civic progress and civic duty can best be understood only through history.

The value of history and civics is psycho-social, and is to be found in their power to arouse race and national

¹ Forum 14: 421-2; see also the Chicago Teachers' "Arithmetic Creed."

(social) instincts in the individual. They set going socio-motive forces. It is in their power to enrich and exalt the inner life, the spiritual nature, that the purely psychological value of history and civics consists. These subjects make their appeal to imagination and the philosophic judgment. They stimulate assimilative activity and make character.

Language and Literature.—Because language is the chief instrument of thought and the principal vehicle of expression, it is of the highest psychological value, both disciplinary and cultural. Exactness of thought, precision and adequacy of expression, and the creation of noble ideals are the best psychological results of the right use of language and literature in the curriculum.

Drawing and Music.—Drawing has disciplinary value, because of its direct training of eye and muscle; and as a medium of expression it is also cultural.

Music trains one of the most important senses to fineness of discrimination; and it enriches culture by giving enjoyment and by affording full expression to feelings which would otherwise be dumb.

(b) Outline of the Curriculum

The generic and abstract statements of the preceding pages find specific and concrete, and, it is hoped, practical, illustration and exemplification in the following tentative courses of study for the different stages of the educational ascent. The fact is kept in mind that the curriculum should be essentially *one* throughout. The curriculum below the university should be made up of the type studies selected from the social and psychological groups, forming in their aggregate that body of knowledge and source of power which every educated man or woman must have to-day in order to be in sympathetic touch with

all phases of the world's work, and in order best to do some of that work.

For the Elementary School

A suggestive course of study for the rural school is given in detail on p. 30. It is readily adaptable to the requirements of a city school, no more variation being needed than would be needed to adjust the course to different rural communities. In every case, whether in city or country, the stress should be laid upon such studies and exercises as will best fit the pupil to take an active, intelligent, reciprocal part in the higher life and progress of his own community.

*For the Secondary School*¹

The discussion of the high school has for some time centered about the question whether it should "prepare for college or prepare for life." The decision, so far as one has been reached, seems to be that it should do both. If it can not serve both purposes through one curriculum, then more than one must be provided. Many pupils who enter the high school do not go to college afterward, because of lack of desire or lack of means and opportunity. Many more than now enter the high school would avail themselves of a course of practical utility, if such were offered. This is found to be true in every instance where a high school has offered courses directly fitting pupils for business or an industrial vocation.

It is neither difficult nor unduly expensive to provide high-school courses for differing needs, if the principle be kept in mind that all educational agencies have the

¹ Uniform Course of Study of Indiana, 1901-02: 183; The School Review, 2: 379, 11: 1, and 12: 545; Regents' Bulletin No. 501, 1900 (Albany, N. Y.), p. 122; Pedagogical Seminary, 9: 63; Atlantic Monthly, 94: 368; The Educational Review, 16: 15; Hanus's "Educational Aims and Educational Values."

same fundamental purpose, that all should be oriented to the common highway of life. And the matter will be further simplified if the colleges, realizing that their chief function is to develop *power* rather than to specialize, will accept graduates from any of the high-school courses, except, perhaps, such as are strictly technical.

The following arrangement of studies will serve to illustrate the interrelations and differences of the courses of the high school:

Branches Pursued by All During First Two Years.

YEAR I.

Term 1.	{	Latin 5. ¹ Algebra 5. Rhetoric with essay practice 3, and forensics 1. Botany 5 (with free-hand drawing). Manual Training ² 2 (with mechanical drawing). Vocal Music 1 (with practice at opening exercises). Gymnasium 1.
Term 2.	{	Latin 5. Algebra 5. Rhetoric with essay practice 3, and forensics 1. Geology 5 (with free-hand drawing). Manual Training 2 (with mechanical drawing). Vocal Music, as above. Gymnasium 1.
Term 3.	{	Latin 5. Geometry 3, alternating with Algebra 2. American Literature 3; essays and forensics 1. Botany 5 (with free-hand drawing). Manual Training 2 (with mechanical drawing). Vocal Music, as above. Gymnasium 1.

¹ Figures following a subject show the number of exercises per week.

² "Manual Training" includes "Domestic Training" for girls.

YEAR II.

Term 1.	Latin 5.
	Geometry 3, alternating with Algebra 2.
	American Literature, as above.
	Geology and Mineralogy 5 (with free-hand drawing).
	Manual Training 2 (with mechanical drawing).
	Essays and forensics, based on Am. Hist. 1.
Term 2.	Vocal Music, as above.
	Gymnasium 1.
	Latin 5.
	Geometry 5.
	American Literature 3.
	American History 2.
Term 3.	Physics 5.
	Manual Training 2 (with free-hand and mechanical drawing).
	Essays and forensics 1.
	Vocal Music, as above.
	Gymnasium 1.
	Latin 5.
Term 1.	Geometry 5.
	American Literature 3.
	American History 2.
	Physics 5.
	Manual Training 2 (with free-hand and mechanical drawing).
	Essays and forensics, as above.
Term 2.	Vocal Music, as above.
	Gymnasium. 1.

YEAR III.

<i>Classical.</i>		<i>Scientific.</i>	
Term 1.	Latin 2, German 3.	Term 1.	German 3, French 2.
	Greek 5.		Eng. Lit. 3, Eng. Hist. 2.
	Eng. Lit. 3, Eng. Hist. 2.		Plane Trigonometry 5.
	Plane Trigonometry 5.		Physics 5.
	Forensics 1.		Forensics 1.
Term 2.	Latin 2, German 3.	Term 2.	German 3, French 2.
	Greek 5.		Eng. Lit. 3, Eng. Hist. 2.
	Eng. Lit. 3, Eng. Hist. 2.		Solid Geometry 5.
	Solid Geometry 5.		Chemistry 5.
	Library research 1.		Forensics 1.
Term 3.	Forensics 1.	Term 3.	German 3, French 2.
			Eng. Lit. 3, Eng. Hist. 2.
			Solid Geometry 5.
			Chemistry 5.
			Forensics 1.

Term 3.	{ Latin 5. German 5. Greek 5. Eng. Lit. 3, Eng. Hist. 2 Library research 1. ¹ Forensics 1.
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Term 3.	{ German 5. French 5. Eng. Lit. 3, Eng. Hist. 2. Chemistry 5. Surveying 2. Forensics 1.
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Commercial.

Term 1.	{ German 3, Spanish 2. Eng. Lit. 3, Eng. Hist. 2. Commercial Geog. 3. Arith. 2. Grammar 5. Forensics 1.
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Term 2.	{ German 3, Sp. 2. Eng. Lit. 3, Eng. Hist. 2. Commercial Geog. 3. Arith. 2. Commercial law and commercial statistics 5. Forensics 1.
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Term 3.	{ German 3, Sp. 2. Eng. Lit. 3, Eng. Hist. 2. Commercial law 5. Polit. Econ. and Com- mercial Hist. 5. Forensics 1.
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Technical and Industrial.

Term 1.	{ German 3. Drawing 2. Physics 5. Sol Geom. 5. Shop work 7. ² Forensics 1.
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Term 2.	{ German 3. Drawing 2. Chemistry 5. Analytics 5. Shop work 7. Forensics 1.
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Term 3.	{ German 5. Chemistry 5. Drawing 5. Shop work 10. ² Surveying 2.
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YEAR IV.

Classical.

Term 1.	{ Latin 2, French 3. Greek 5. German 5. Psychology 5. Gen. Hist. 2. Forensics 1.
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Scientific.

Term 1.	{ French 5. Physiology 5. German 5. Psychology 5. Gen. Hist. 2. Forensics 1.
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¹ This should take much time in preparation, but only one period a week for reporting results.

² This includes "Domestic Science" for girls.

Term 2. { Latin 2, French 3.
Greek 5.
German 5.
Element. Sociol. 3.
Gen. Hist. 3.
Forensics 1.

Term 2. { French 3.
Zoology 5.
German 5.
Element. Sociol. 3.
Gen. Hist. 3.
Forensics 1.

Term 3. { Latin 2.
French 5.
German 5.
Greek 5.
Gen. Hist. 3, with much
collateral library work.
Logic 3.
Forensics 1.

Term 3. { French 5.
German 5.
Zoology 5.
Library research and
Science Seminar 2.
Logic 3.
Forensics 1.

Commercial.

Technical and Industrial.

Term 1. { Spanish 5.
Stenography 5.
German 5.
Business composition and
forms 3.
Forensics 1.

Term 1. { Mechanics 5.
Desc. Geom. 3.
Drawing 2.
Shop work 10.
Bus. Comp. and forms 3.

Term 2. { Spanish 5.
Stenography 5.
Commercial Arith. and
Bookkeeping 5.
Typewriting and Spell-
ing 5.
Forensics 1.

Term 2. { Heat 5.
Desc. Geom. 3.
Drawing and Design 5.
Shop work 10.
Study of Materials 2.

Term 3. { Stenography 5.
Spanish 5.
German 5.
Commercial Arith. and
Bookkeeping 5.
Typewriting and Spell-
ing 5.
Drill in use of modern
office facilities 2.
Forensics 1.

Term 3. { Electricity and Magnet-
ism 5.
Shop work 10.
Study of Materials 2.
Drill in use of modern
office facilities 2.
Drawing and designing 5.

It is believed that the general scheme of secondary studies above outlined is adaptable to the purposes and functions of the high school in the country, in the smaller towns, and in the large cities. A rural high school, or one in a small town, would probably use one of the courses only, not being able to use all, while the larger centers of population could well afford to provide all the opportunities shown in the diagram. The cost of maintaining all the courses would be not greatly more than that of properly maintaining any one of them. During the first two years there is no differentiation of work; during the last two there are many "constants" common to all the courses. Throughout all courses provision is made for more or fewer cultural subjects, and during the undifferentiated first two years some utilitarian work is required of all.

The teaching of such subjects as are common to the several courses will be of the same character in each course.

All exercises that aim at the unification of the social, purposive, and cultural sentiments of the school, and they should be numerous, should be so arranged as to exert their influence upon all. This would go far to correct the evils of early specialization; the graduates of the high school, from whatever course, would go forth into the community with many sentiments, ideals, and purposes in common, and this would be altogether good both for the individual and for the social whole. The social solidarity which makes the difference between a democratic state and a mere mass of people can be secured in no way better than by having boys and girls of different social and industrial classes pursue the same cultural and liberalizing studies together.

For the College

The curriculum of the college is to be determined by the function and place of the college in a system of higher education.

If the college does its own distinctive work, it will well serve as a medium by which the student may best pass from the high school to the university or to the professional school; and at the same time it will fit such as do not expect to go into the university, for taking and sustaining a place among the liberally educated. The business of the college is to take up the work of education where the high school leaves it, and without "lost motion" on the one hand or too close an imitation of the university on the other, carry forward the educative process to a point *just short of close specialization*. The function of the college is to give breadth and power rather than narrow training and specialized skill.

If the college works successfully to these ends its curriculum must include those subjects a study of which will result in giving the student a knowledge and sympathetic appreciation of the great world movements and the forces that have caused them, in politics, in literature, in science, and in art.

In the following suggestive schedule of studies for the college an attempt is made to give specific form to the principles above laid down.

If the American college accepts the suggestions made by President Butler,¹ and shortens the Bachelor's course to two years, all the college preparatory work outlined above for the high school will be prerequired. If the colleges continue to offer courses as now arranged, such extended preparatory work in the high school should not

¹ See his Report to the Trustees, for 1902.

be required for admission to college, and the time for the Bachelor's degree should not be less than 144 weeks, four years of three terms each or, preferably, three years of four terms each.

There is so little probability of an early settlement of this question as to the length of the college curriculum that no attempt is here made to arrange the subjects by years. But the general order and relative proportion of the subjects in the two groups, classical and scientific, are indicated.

Classical Group.

Languages: Two ancient and at least three modern languages, one of which should be English, should be required.

Literature: The Literature of each of the languages studied.

History: Ancient, Mediæval, and Modern, with intensive work in at least one elected division.

Mathematics: Advanced Algebra, Analytics, plane and spherical Trigonometry.

Sciences: Brief general courses in biological and physical sciences.

Psychology: A general view of the matter and methods of modern psychology.

Education.

Sociology: This should include economics, political and social science, with a history of each, and much intensive, inductive work.

Philosophy (Metaphysics): The course should include the history of philosophic thought, the theories of modern philosophy, and ethics. The work in one or more of these divisions should be intensive.

Music and Art: General required courses and special electives.

Forensics.

Cultural lecture courses.

Scientific Group.

The Observational Sciences: General required courses in all, showing their close interrelations; intensive work in special electives.

The Experimental Sciences: As in the preceding.

Mathematics: Through the differential and integral Calculus, with electives in higher subjects.

History: A general view, with special work in American History.

Languages: Required courses in English, French and German. Electives in other modern languages and in Latin.

Literature: English and American; general courses.

Philosophy: General view.

Sociology: General view.

Forensics.

Cultural lecture courses.

It is believed that every subject which the college, distinctively as such, should offer is included in the groups here given, and that nothing is included which the college can afford to omit. The lists of subjects given above are suggested on the assumption that the college, when it comes again to do its own proper work, will offer only the two standard courses, not permitting narrow specialization. Therefore, neither technological nor professional training is here included in the work of the college.

The Products of a College Education.—Education through any agency is a process, and in the college graduate its products should be (1) a body of well-digested knowledge; (2) some power of independent study and investigation; (3) liberal culture, which must include an *impelling desire to continue the educational process in some way*; (4) and a moral strength that shall enable its possessor to keep his feet in the stress of the world's forces. Of course, it may be said with truth that these should be the products of the educational process in the high school, even in the grades. The difference is one of degree, and of emphasis upon the kind of knowledge. The point to be made here is that it is not the business

of the college to copy the university, nor to overlap too far upon the legitimate work of the high school.

Knowledge.—The knowledge which the student should have as the result of pursuing a college course should be general rather than special, and should acquaint him with the great world movements and the forces that have brought them about. He must know, and be in sympathy with, the best that has been done in all the great fields of human endeavor in politics, in literature, in science, and in art. This is not too much to require, in spite of the fact that the special modes of human effort have multiplied greatly in late years, and the sum of knowledge is increasing at a rapid rate. It is not meant that the college graduate should know any one thing as the specialist knows it, but that he should *know enough to understand and appreciate what the specialist in any field is trying to do*, and what relation the truth the specialist is searching for has to other truths. With a proper correlation of subjects in the college curriculum (and the college is the place where correlation has its greatest value), such knowledge will not be difficult to impart or to acquire.

The business of the college as regards knowledge is not to add to the sum total (that is the duty of the university), but to place what is already known in possession of its students, so presented that the learner shall be filled with a lasting desire to keep in interested and intelligent touch with all phases of intellectual attainment throughout his post-collegiate life.

Power.—Power is gained from independent self-directed work. This does not mean, it may be necessary to repeat, that the college student is to do research work in the university sense; but original work may be done

in the rediscovery and mastery of truth which, however long established, is yet new to the student. It is this kind of original work which results in the power that the college should give. It is original in the sense that its methods and results are new to the student; and it is independent in the sense that the pupil should do much of it upon his own initiative and without specific direction from the teacher. To secure the best results some part, however small, of the work in the most important of the subjects offered by the college should be intensive. The student will thus gain some insight into the methods and value of thoroughness, and will acquire some of the habits and impulsion of the researcher.

Culture.¹—Culture is a product of breadth of knowledge, familiarity with the conventions of good society, ready sympathy in thought and feeling, and personal poise. Some of these elements the college can put into the life of the student; others are either innate or absent. If innate the college must develop them; if absent, no form of education can bestow them.

Breadth of knowledge should be provided for not only in the subjects of the regular curriculum, but in suggested courses of reading, and general lectures by members of the faculty and others. Each member of the faculty should, in these lectures, tell the whole student body what is being done throughout the world, in his own department of knowledge, and he should tell it so simply, so clearly, and with such enthusiasm as to make that department of knowledge seem to every student a highly desirable field to know more about. In short there should be

¹ Education 20: 557; Educational Review 1: 105; N. E. A. Proceedings 1901: 619; School and College 1: 1; World's Work 8: 4980; Educational Review 16: 147.

much real "university extension" within the college itself, from one department to another.

The subject which should focus all others and correlate them is *philosophy*, the lecture presentation of which should always be by a man with a very clear general view of all the great fields of human learning and inquiry, and with power to set each in right perspective.

A series of lectures here indicated, by the college faculty, and by men and women not in the faculty, who have thought most and done most and can tell it best, would do more to broaden and enrich student life in college than quadruple the same time spent in routine class work. Any student going from such influences into university work would never suffer from the ignorant and unsympathetic narrowness which is so often the reproach of the modern specialist.¹

For the Teachers' Training School

The Function of the Teachers' School.—There seems to be danger of forgetting that the sole concern of the state teachers' training school is with the improvement of teaching, and that the chief stress should be laid upon improving the work in the *rural* schools.

In adapting its work to the educational needs of the whole community which it serves, the training school must neither refuse to recognize the actual conditions under which its pupils will have to teach, nor fail to

¹ Much has been written of late upon the topics touched on in the preceding pages. Very interesting matter will be found in the following articles, "A New Definition of a Cultured Man," (Eliot), *World's Work*, 6: 3806; "The Ideal Education," *Independent*, 54: 2660; "Higher Education and Citizenship," *Independent*, 54: 690; "The Aim of Education," *Journal of Pedagogy*, 16: 43; "Education and the Individual," *Journal of Pedagogy*, 14: 321; "Law of Future Specific and Social Efficiency," *Journal of Pedagogy*, 15: 119; "Education for Social Control," *N. E. A. Report*, 1901: 619; "Scholarship and Service" (Butler), *Ed. Rev.* 24: 1; "Fundamental Principles of American Education," *Ed. Rev.* 24: 187.

show its students and its public how these conditions may be improved.

Unmindful of these facts, some teachers' training schools offer collegiate courses of study, with collegiate degrees, and think more of fitting students for college than of their own proper work.

To a forgetfulness of their real duties also may be attributed the pronounced tendency of most of these schools to an undue insistence upon high standards of admission to even their shortest courses. A city teachers' training school, or one situated in a state where rural high schools are numerous, may require its students to present a high school diploma as a condition of admission. In communities where high schools are few such a requirement would be unjust. It is far better that the many should get some help in their work than that only a select few should be offered superior advantages.

This is in no sense intended to mean that thoroughness of scholarship need not be one of the products of the teachers' training school. It simply means that however desirable it might be to have every rural school taught by a college graduate, such an ideal is at present unattainable, and the teachers' school must face actual conditions and make the best of them.

The college and the university should uphold and raise higher the standards and dignity of advanced scholarship. The chief business of the teachers' training school is, first, to give thoroughness in a *teaching knowledge of the common branches*; second, to show how to organize, direct, and teach a school; and, third, to introduce its students to the higher branches.

These are the essentials; more may be done if opportunity and means allow.

There may, for example, be a special course for kindergartners and for graduates of high schools, and advanced work for students who have completed an academic course in college. But the first and plainest and most important duty of the state teachers' training school is *to meet the needs and conditions of the rural schools.*

Two Courses Offered.—The teachers' training school should offer at least two courses, a shorter and a longer; the one for such students as can prepare in a half year, or at most a year, for work in the elementary schools; the other for such as can spend more time in preparation for better work or higher positions.

The Short Course.

(24 to 48 weeks.)

Arithmetic, $\frac{1}{2}$.¹

Algebra, 1.²

Civics, $\frac{1}{2}$.

Composition and Rhetoric, 1.

Drawing, 1, twice a week.

Forensics, 1, once a week.

Geography, $\frac{1}{2}$.

Grammar, $\frac{1}{2}$.

Gymnasium Practice, twice a week.

Manual Training, 1, twice a week.

Nature Study (Elementary Sciences), 1.

Observation in the Pedagogical Museum and in the Model School, with oral and written reports, 1, three times a week.

Pedagogy (theoretical), $\frac{1}{2}$.

Penmanship, $\frac{1}{2}$.

Physiology and Hygiene, $\frac{1}{2}$.³

Professional Reading, $\frac{1}{2}$, once a week.

Vocal Music, 1, three times a week.

¹ Subjects marked $\frac{1}{2}$ are taken for one-half of the time of the course.

² Subjects marked 1 are taken throughout the course. If Monday is used as a holiday, instead of Saturday, as is the case in many schools, much time will be saved.

³ All pupil-teachers should be especially instructed in detecting physical defects in children, and in what to do in cases of accident.

The Long Course.

(Two years of 48 weeks each.)

YEAR I.

Term 1.	<ul style="list-style-type: none"> Higher Arithmetic completed. Rhetoric, with much practice in composition. Botany. Pedagogy (general outline). Drawing, twice a week. Forensics, once a week. Music, twice a week. Manual Training, once a week.
Term 2.	<ul style="list-style-type: none"> Higher Algebra. American Literature. Physiology and Hygiene. Psychology. Drawing, twice a week. Forensics, once a week. Music, twice a week. Manual Training, once a week.
Term 3.	<ul style="list-style-type: none"> Higher Algebra, cont. American Literature. Physics. General Methodology, 3 times a week; observations in the Model School, with oral and written reports, twice a week. Drawing, twice a week. Forensics, once a week. Music, twice a week. Manual Training, once a week.
Term 4.	<ul style="list-style-type: none"> Higher Algebra, completed. English Literature. Zoölogy. Professional reading and observation in the Model School, with oral and written reports. Drawing, twice a week. Forensics, once a week. Music, twice a week. Manual Training, once a week. Gymnasium Practice throughout the year.

YEAR II.

Term 1.	Plane Geometry. English Literature and English History. Chemistry. Educational Economy: School equipment. Observation in Pedagogical Museum and Model School, with oral and written reports, 3 times a week. Forensics, once a week.
Term 2.	Trigonometry. General History. Sociology. Educational Economy: Organization and Administration of Schools. Practice teaching. Forensics, once a week.
Term 3.	Review of the Common Branches, with their Method- ology. American History and Civics. Practice teaching, and Observation in the Model School. Forensics, once a week.
Term 4.	Review of the Common Branches, with their Method- ology, continued. School Laws of the State, once a week. History of Education: library study. Practice teaching. Forensics, and development of a thesis.

In urging the need and expediency of such courses as those given above, the emphasis is placed, as it should be, on the actual conditions and requirements of the majority of rural schools. In those States that have a large urban population and numerous high schools the State teachers' training schools can afford to have higher standards of admission, offer stronger courses, and prepare teachers for the highest positions in the public schools. The State teachers' training school should also offer courses especially designed for county superinten-

dents. Such courses would contain, among other things, instruction in the school laws, in the best modes of administrative detail, and in plans for bringing the schools and community into closer touch.

In some cases the training school may sustain courses for the training of institute instructors.

B. ADMINISTRATION OF THE CURRICULUM

(a) Ends in View

The ends in view in planning and administering a course of study are (1) the discipline and culture of the individual, (2) his socialization, and (3) the careful economizing, to these ends, of the time and energy of both teacher and pupil.

Discipline and Culture

Discipline.—Discipline is that condition of the mind which is characterized by power—power to perceive, to remember, to reflect, and to feel intensely, but to restrain feeling—and by *skill* to do these things quickly and well, and to express them adequately.

General Discipline Possible.—Those who have claimed that there is no such thing as “general discipline,”—that there are memories, but not *memory*, judgments, but not *judgment*, and so on,—are quite as wrong as those who, earlier, claimed that general discipline was the chief, if not the sole, end of education. The experience of every educated man and woman, and the increasing demand, in every kind of business, for the graduates of high schools and colleges, give conclusive evidence of the value of general discipline. Such evidence is far stronger than any amount of mere *a priori* theorizing, or the sporadic experimenting that has been done in psychological laboratories.

Discipline comes from hard work done with thoroughness and with the sort of interest that gets its satisfaction in the mastery of a matter both for ultimate ends and also *for the sake of mastering*. It results from such an administration of the curriculum as holds the pupil steadily to *independent work*, tested constantly by clear, accurate, and definite results. The proof of discipline is the ability of the pupil, at any given point in the course of study, to do, with care and confidence, any or all of the essential work required up to that point, and to take up and quickly master new work.

Culture.—Culture is a thing of the spirit; it is the highest product of education. It rests upon knowledge, but is far more than knowledge. It manifests itself in personal bearing, in courtesy, in character, in depth and breadth of learning, and in the ability and willingness to use learning for self-enjoyment and for the happiness of others.

So to administer the course of study that the pupils shall gain culture can be done only through the vital contact of the teacher's rich and cultured personality with the aroused and appetent personality of the pupil.

*Socialization of the Individual*¹

Criterion of Civilization.—The chief criterion of an advanced and advancing civilization is the degree of interdependence and mutual helpfulness of its members. The lowest society, that which is only one or two removes

¹ So rapid has been the growth of the educational ideal expressed by this phrase that there is already much good writing about it. A very few of the most helpful references are here appended: "Higher Individualism as the End of Education," *Journal of Pedagogy*, 12: 230; Small's "Demands of Sociology upon Pedagogy"; Young's "Isolation in the School"; Dewey's "School and Society"; Henderson's "Education and the Higher Life"; "Social Movement in France," *Proceedings N. E. A.*, 1902: 383.

from the jungle, is characterized by a crassly physical outworking of the law of survival. As man ascends, the law still holds inexorably, but its outworking is more and more spiritual. The value of the individual, his fitness to survive, is expressed in social terms, in terms of the service he is able to render to social life and growth. It is this idea which gives substance and force to the modern ideal of Democracy.

Mutual Obligations of Society and the Individual.—

It has taken nearly twenty centuries to establish the freedom of the individual among the most civilized nations. It is time now to recognize the inescapable reciprocal obligations of the individual and the social whole.

Public education must fit boys and girls to meet the material and spiritual needs of that public which educates them, instead of merely fitting them to get out of the public that which meets their own wants. This is what is meant by the phrase "socialization of the individual." It is to be attained by nothing short of putting school administration into the hands of men and women who are not themselves isolated from the social whole by their modes of thought and life, but who are in vital touch with all the great currents of human progress, are inspired by civic pride and patriotism, and are eager to bring each pupil into the full heritage of the race.

Economy of Time and Energy

The demand is stronger to-day than it has ever been that the time and energy of the learner be economized. Students of education are earnestly striving to meet this demand by determining essentials of subject-matter and essentials of method and management. This work is just beginning.

(b) Theories of Administering the Curriculum

The "Culture Epoch" Theory

About forty years ago, a disciple of Herbart outlined a scheme of cultural and moral education based upon the "culture epoch" theory.¹ This theory assumes that the individual repeats, in his own development, the development of the race. The scheme of school education founded upon it provides for a succession of subjects and methods of presenting them that shall conform to the several more or less distinct epochs of racial evolution.

In Germany.—In Germany, more than anywhere else, the culture epoch theory has been put into practice. But even there only the culture side of the work is considered in selecting material. The course begins with myths, and develops through Robinson Crusoe, Thuringian stories, and the Niebelungen Songs, and early periods of German history, to the latest epochs of national life. Literature and history are thus taken as the sources of interest and educative material. The relation of the pupil to his present material environment is practically ignored in the application of the theory.

In America.—The theory has not been worked into the course of study to any considerable extent in this country. Some experiments are going forward that will determine what is best in it, and how it may be modified to meet the conditions of American life.² So far as these experiments have gone they have emphasized the value of constructive work, some form of manual training, and have recognized by carefully planned exercises in nature study the individual's recapitulation of the race's long struggle with its material environment.

¹ Ziller, "Grundlegung zur Lehre vom erz. Unterricht."

² See Scott's "Organic Education," D. C. Heath & Co.

Value of the Theory.—The chief value of the culture-epoch theory is in the side light it throws upon child psychology, and in the recognition it gives to the individual's oneness with the race. It is helpful in explaining certain tendencies and impulses peculiar to children's growth. But it is doubtful whether anything of value has been or can be discovered by working conformably to the theory that might not be discovered through a sympathetic study of the individual without reference to his recapitulation of race development.

Any attempt to apply the theory closely must be futile, for only the most general correspondences can be found between the periods of the child's development and the epochs of race growth. Even if it were possible to establish exact correspondences, it would be unwise to plan a course of study and methods of teaching in strict conformity therewith, for the sufficient reason that, in his recapitulation, the average child exhibits some characteristics it is highly desirable to eliminate. The child, as the heir of the race, should be put in possession of only the best which the race has gained for him. And he should be trained to adapt himself to the actual conditions of modern life, not to those of bygone eras.¹

Correlation of Studies

Ziller, who sought to make practical application of the culture-epoch theory, also planned an arrangement of studies to secure economy of time and energy through association of subjects. The terms "correlation," "concentration," and "coördination" have been used to describe this arrangement.²

¹ See further, N. E. A. Report, '99: 576; Ed. Review, 15: 374; Ed. Review, 17: 105; Journal of Ped., 12: 295; 16: 136.

² Refer to Ed. Review, 10: 364; Report of Nat. Com. of Ed. '93-4, 1: 492.

Definition of Terms.—So far as definitions may be drawn from the literature of the Herbartian writers and their critics, the term “correlation” is generic and includes the other two. “Concentration” means the grouping or correlating of studies around a central core, between which and the other subjects some vital relation exists.

“Coördination” is the correlation of several *groups* of studies with one another, each group made up of associated subjects, and equal in rank to each other group.

Concentration.—Ziller used the literary and historical material of his culture-epoch scheme as the “core” of concentration. All the work of each grade was, as far as possible, to be concentrated around this culture material, and made subordinate to it. This plan of concentration left out nature study and constructive work. This idea has been worked out, theoretically, with considerable detail by the American Herbartians. In a few schools it has been applied practically with some success.

Other cores of concentration than the culture material of literature and history have been suggested, and in some instances used. Col. Parker used Geography as a center; and Dewey centers the work about the constructive activities of the pupils.

Coördination.—Some of the most careful students of education, whose thought is not too strongly tinged with Herbartianism, urge the impossibility of complete concentration, of making any one branch supreme and subordinating all others to it. They suggest a correlation which shall recognize two or more coördinate groups of subjects, the subjects of each group being interrelated. Frick proposes two groups, the humanistic and the natural. De Garmo proposes three groups,—(1) the

humanistic, or cultural, (2) the natural, or scientific, and (3) the economic, or the group made up of the industrial and commercial arts. Prince offers four groups,—(1) the humanistic, made up of knowledge relating to man, (2) scientific, (3) mathematical, and (4) expressional. Harris insists upon five coördinate groups,—(1) literature and art, (2) mathematics, (3) geography as natural science, (4) grammar as typical of logic and philosophy, (5) history, leading to sociology, politics, etc.

Two Bases of Correlation.—In all this discussion, there has not been sufficient recognition given to the fact that the subject of correlation may be approached from two standpoints. Correlation may be based upon the relations existing between the *subjects themselves*; or it may be based upon the relation which the subjects severally sustain to the *mind of the learner*. It is here contended that the mind of the learner is the chief or primary basis of correlation; that the relations between the subjects themselves is secondary, and grows out of and depends upon the first.

The contention that the mind of the learner is the true core of correlation is not new, but no scheme of correlation around it has been proposed, even by those who have most insisted that the pupil is the center. Prince comes nearest to recognizing the true basis of correlation in his fourth group, made up of *expressional* subjects.

Correlation Based upon Mental Operations.—The operations of the mind being acquisition, assimilation, and expression, it is evident that the studies and exercises of the curriculum should be grouped as *acquisitional*, *assimilational*, and *expressional*.¹ Under this scheme of relating

¹ Refer also to Roark's "Psychology in Education," pp. 155-265, and "Method in Education," pp. 96-103.

the subjects to the pupil rather than relating them to one another, the acquisitional group includes *science*, the facts of nature, and *history*, the facts of man; the assimilational group is made up of *mathematics*, the study of quantity relations, and *philosophy*, or thought relations; the expressional group is made up of *language*, *literature*, and the *arts*, all the forms and processes whereby humanity expresses itself.

The Interrelation of Subjects.—The second and subsidiary basis of correlation, which is the relation of the several subjects to one another, is useful in making each subject or each group help in the mastery of other subjects and groups. For example, nature study is helpful in geography, geography in history, history in civics, and language and manual training in all subjects. The rich content of the acquisitional subjects furnishes the material for use in the assimilational group, and both the acquisitional and assimilational supply the subject-matter, the feeling and thought, for the expressional group. An even more intimate correlation of the materials of each subject rests upon the fact that in each subject there is matter to be acquired, assimilated, and expressed.

Correlation upon the secondary basis, that of the interrelations of subjects and their mutual and reciprocal usefulness, is valuable in balancing the defects of psychological correlation. The former is objective, worked out in teaching the child, in his learning each branch not as an end in itself but as supplementary to others and as a tool in further learning. The latter, psychological correlation, is mainly subjective, guiding those who plan courses of study, and those who draw from these courses the materials with which teaching is done. Few courses of study have been psychologically planned.

Interest

The theory and the practice of education owe much to Herbart and his disciples for focusing the thought of teachers upon the economic value of interest. The doctrine of interest has been fruitful of good teaching, and of comfort and joy to the pupil, even though it has been pushed to an injurious extreme by some over-zealous practitioners.

Interest Identical with Feeling.—*Interest* may be used as an equivalent term for any or all of the feelings, emotions, affections, or desires. We are interested in whatsoever arouses, stimulates, or gratifies *feeling*.

It is to be regretted that Herbart himself did not clearly recognize the identity of interest with *feeling* as defined in the older psychology. To have perceived such identity would have saved much obscure discussion.

All the phases of interest described by Herbart,¹ and other forms not named by him, may be shown to be forms of feeling. Thus, the "interests arising from knowledge" are identical with the *intellectual feelings*; the "interests arising from human relations" are simply the feelings of sympathy, pity, the desire for society, and the desire for harmony with God.² Such a view of interest places it upon familiar ground, and makes it plain that knowledge, growth of character, development of will power are all to be attained through the stimulation of right *motives*.

Higher Application of the Doctrine of Interest.—The most important service rendered by Herbart, next to his showing the intrinsic economic value of interest in securing attention for rapid and effective work, was his in-

¹ DeGarmo's "Herbart and the Herbartians," p. 64.

² See Roark's "Psychology in Education," Chaps. X and XI.

sistence upon interest as desirable in itself, as a pleasant, comforting, and sustaining state of mind. The best and highest application of the doctrine sends students forth from any grade, alert to see and to hear the best, eager to know, open minded to the truth, full of noble aspirations.

Herbart showed how the emotional nature, which had been for centuries condemned and suppressed in the schools, could be made the mainspring of right action and a source of legitimate joy. There is no conflict whatever between this idea of interest and the idea of duty, or even of the necessity of drudgery. The feeling of *oughtness* is innate in the human being, and the performance of duty gratifies this feeling and so prompts to the further discharge of duty. So far from there being antagonism between drudgery and interest, it is interest that makes the performance of drudgery possible. Drudgery may be defined as work which is uninteresting in itself, but which must be done in order to the attainment of some end that is desired. Interest carries the worker through the drudgery to the desired result, and hence the need that the teacher shall often direct the attention of the pupil to ultimate goals, fixing his interest upon them, and showing from biography, past and present, how faithful application to the present task will lead to the full satisfaction of his right ambitions. The function of the teacher is not to follow blindly the interests of the pupil, but to arouse in him interest in the work he ought to do. One of the highest pleasures comes through the consciousness of overcoming obstacles, of facing down a disagreeable thing, to reach something finally worth while.

Some Misapplications of the Doctrine.—Although Herbart clearly meant by interest “something of vast importance to the development of the individual, not a

mere tickling of the mind for transient ends," yet some of his too ardent followers have contended that the transient interest, the mere passing whim of child or student, is the guide pointing the way the teacher must follow. This extreme and harmful view has not only been advocated theoretically but has been put into actual practice, in one instance, at least, going so far as to allow the children of an elementary school to plan the exercises from day to day.

The Doctrine of Election.¹—There is some danger of a similar misapplication of the doctrine of interest in the later doctrine of election in studies, so earnestly urged in recent years. A revolt from the prescribed narrow and formal curriculum of former days was inevitable, but it should not reach the extreme of anarchy. Individual interests, aptitudes, and social needs are sufficiently and safely provided for if choice is permitted between several different courses or groups of studies in the high school and college. To speak of election below the high school is, surely, to "darken counsel by words without knowledge." A principle which is fundamental, and therefore safe, should determine the extent of election, namely, *to the learner should be given that knowledge and those tools which the race has found most serviceable in bringing it to where it now is.*

To do otherwise is to make the accumulated experience and wisdom of the race count for little as compared with the inexperienced whim or unreasoned impulse of the pupil.

In discussing this question of electives much has been said of the differences between individuals, and the need

¹ Refer to Education 21: 515; Forum 31: 599; Educational Review 4: 53, 142; Report of Nat. Ed. Assoc. '97: 373; Educational Review 5: 142; Report of Nat. Ed. Assoc. 1900: 428; School Review 11: 690.

of adapting school work to these differences. But the fact remains that children are more alike than they are different, and that early specialization is impracticable and unwise.

There is plenty of room for individual variation in work on the same subjects. All may take the same nutriment, but each will assimilate in his own way. With all the hubbub about the "individual" no one has yet offered an individualistic course of study. Unless the child has a markedly strong bent in some direction he has no need of electives below the second or third year of the high school.

The Aims of the Different Schools.—The purpose of the elementary school is to acquaint the pupil with the *alphabets* of human knowledge and progress. The purpose of the secondary school is to put him into more secure possession of these and to have him use them either in preparing for advanced study or in preparing for a vocation. The aim of the college is to introduce the student to the whole circle of knowledge, that he may be able to choose which sector he shall make his own. There can be no intelligent and real choice without a knowledge of values. In none of the courses or groups of study, therefore, between which choice is offered, should any one of the great divisions of human knowledge and culture be unrepresented.

(c) Waste in Administration of Curriculum

The two greatest causes of educational waste are (1) inefficient teaching, and (2) using more time than is needed. Inefficient teaching always wastes time; but time may be wasted where the teaching is good, owing to faulty methods of organization and administration of the system as a whole. The faults of school organization that

have wasted most time are (1) inflexible gradation, (2) "block" promotion (the two together constituting what has so well been named the "lock-step"), and (3) the shortness of the school year.

Grades and Promotions.—The introduction of the graded system into school work, by Sturm, was a great step forward in the economical administration of the curriculum. But like many other good things, it was carried to a harmful extreme, and it took two or three centuries to reach the conviction that inflexible gradation and yearly promotion in blocks are fertile sources of waste.

After the glamour of the idea of strict uniformity faded, it did not take long to realize that the plan of moving whole grades forward by yearly promotions involved other wasteful practices. Promotions were made to depend largely upon set examinations, and examinations were held mainly for the purposes of determining promotions. If a pupil failed in one or more subjects he was usually required to re-take the whole work of the grade in which the failure was made. Bright pupils, not having enough to do, became lazy and indifferent. Dull pupils, being driven too fast, became discouraged and dropped out of school.

Schoolmen and the public both came to feel that the schools must give every pupil an opportunity and stimulus to do his best and to advance as rapidly as his best would justify. This feeling has resulted in much careful and valuable experimenting to discover the best means of economizing pupil time and energy.¹

¹ See "Promotions and Examinations," Bureau of Ed., Wash., D. C.; "Lock-step in Ed.," *Atlantic Monthly* 79: 749; "Successful Exper. in Promoting," *Educational Review* 18: 23; "Promotion of Bright and Slow Pupils," *Educational Review* 19: 296; *Nat. Report '90-'91*, 2: 981; *Nat. Ed. Assoc. Report*, '99: 163; 1900: 332; 1901: 285; *The World's Work* 6: 3785.

The following conclusions drawn from experiments already made, furnish safe ground from which to push further experimentation.

Average Length of Course.—The course of study between the kindergarten and the high school should be planned so that the "average pupil" can cover it in six years. This can be done, but only by making the school year consist of *four* terms of ten or twelve weeks each, instead of three terms, or, as is most usually the case, two.

The rapid growth of the "vacation school" idea is sufficient evidence that pupils do not need three months absence from school. It has long been evident to teachers and parents that a vacation of a full fourth of a year is harmful to the best interests of the pupil and of the school. By the four-term arrangement two full school years could be saved out of every eight, thus reducing the time to six years, without weakening the course of study or lessening the total amount of work done. The terms should be used more as promotion intervals than as time allotments for the completion of a subject.

This arrangement would permit the slow pupil to complete the course below the high school in about the same length of time it now takes the bright one to do it.

Examinations.—The teaching value of examinations has been discussed elsewhere.¹ As an important element in educational economy they are rapidly falling into disesteem and disuse, in so far as promotions are made dependent upon them.² The final examination, at its best, is not a conclusive test of the pupils' fitness or unfitness to proceed. A final examination should never count as

¹ See Roark's "Method in Education," p. 92.

² "Promotions and Examinations," (White), Circular of Information No. 7, 1871, Bureau of Education, Washington.

more than half, if so much, in the making up of "passing" records. In not a few schools the examination for promotion has been abandoned altogether, and the pupils are advanced upon the recommendation of the teacher, indorsed by the principal.

Promotion Intervals.—Reclassifications and promotions should be made often enough to enable the brightest pupils to forge ahead as fast as their superior ability will carry them and also to enable the most backward pupils to move as slowly as they need to do in order to a confident mastery of their work.

As suggested in a preceding paragraph, the school year, which should be forty-eight weeks long, may conveniently be divided into four terms, and these may be used as promotion periods. When by the end of a term, any considerable number of pupils in a given grade show marked superiority to their fellows who started with them in the same grade they should be moved up a whole term (one-fourth of a year). As the pupils of the advanced term should be reviewing at the beginning of that term, the newly promoted pupils will have but little difficulty in catching step with them and keeping the pace throughout the term.

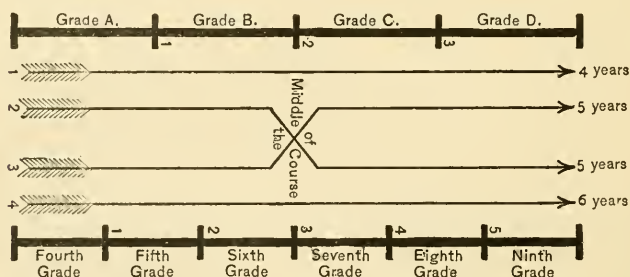
At the close of any given year, the strongest pupils should be called out from all the grades of the same rank and put into a division to themselves, with a teacher who can send them forward as they ought to go. Such a group of pupils would be able in a year to overtake a grade two years ahead of them at the time of starting. Thus, the strong group that would start separate work at the beginning of the third year, would be able at the end of a year to unite with the fifth year pupils at the beginning of the fifth year. An arrangement similar to that

just described has been in force in Cambridge, Mass., for many years.

The plan may be better understood from the accompanying diagram and explanations, taken from the Report of the Cambridge Schools for 1902:

"In the grammar schools special teachers are appointed to help such pupils as seem able to do the work in less than six years, and to aid those who without personal instruction would require more than six years. This action of the committee removes the most serious objection to the graded system of schools.

"The course of study is divided in two ways: (1) into six sections; (2) into four sections; each section covering a year's work. Pupils taking the course in six years are classified in six grades, called the fourth, fifth, sixth, seventh, eighth, and ninth grades. Those taking it in four years are classified in four grades, called grades A, B, C, and D. When pupils are promoted to the grammar schools they begin the first year's work together. After two or three months they are separated into two divisions.



"One division advances more rapidly than the other, and during the year completes one fourth of the whole course of study. The other division completes one sixth of the course.

“During the second year the pupils in grade B are in the same room with the sixth grade. At the beginning of the year they are five months (one half the school year) behind those in the sixth grade. After two or three months, grade B is able to recite with the sixth grade, and at the end of the year both divisions have completed one half the course of study—the one in two years, and the other in three years. The plan for the last half of the course is the same as for the first half, the grades being known as the seventh, eighth, and ninth in the one case, and as C and D in the other.

“There are also two ways of completing the course in five years: (1) any pupil who has completed one half the course in two years may at the end of that time be transferred to the seventh grade, and finish the course in three years; (2) any pupil who has completed one half the course in three years may at the end of that time be transferred to grade C, and finish the course in two years. In both cases these changes can be made without omitting or repeating any part of the course.”

Recently, much interest has been taken in the “Batavia experiment” in aiding the progress of backward and slow pupils.¹ The plan, in brief, is to place two teachers in a room, one to conduct recitations in the usual way, the other to give individual assistance to the pupils in their study. The reports of results so far obtained are favorable to the plan.

Time in the High School and College.—But it is by no means solely in the elementary school that time is wasted. The waste goes on quite as much in the second-

¹ See the Reports of Supt. Jno. Kennedy, Batavia, N. Y. Also the *Journal of Pedagogy* 14: 89, 130; and 16: 1.

ary school and college as in the grades. Tradition has made a sort of fetich of the four year period, and in spite of the group system in a few high schools and colleges and the strong recommendations of Eliot and Butler to shorten the time spent in college, all classes of school officials seem fearful of results if the four year course be given up or modified.

But the same opportunities for rapid work and prompt advancement should be given in the higher institutions as in the elementary schools, though in a different way. In the grades the pupils are grouped; in the high school and college the studies should be grouped according to the laws of real correlation, and students encouraged to take more or fewer groups at a time, according to their capacity. A certain number of groups should constitute the requirement for graduation, and the student should receive his diploma upon the satisfactory completion of the required number of groups, whether it has taken him two years or ten to complete them. It is true, such an arrangement would do away with the classes — freshman, sophomore, etc.—and with class spirit, class “rushes,” and such mediævalisms, but such losses would be a great gain.

The School Year.—The greatest saving of time, however, greatest because time is saved to all, whether dull or bright, is that secured through the lengthening of the school year. Most private normal schools are open forty-eight weeks in the year; many state normal schools have a summer term; Chicago University has four regular quarters (forty-eight weeks), and the older universities are adopting practically the same plan, by holding “summer schools.” The experience of these institutions, together with that of the cities that have vacation schools,

has demonstrated the great value of a longer school year.

If the teaching be of the right sort, and adapted to the seasons, the summer, for example, being availed of for nature study and school gardening, the pupils will be happier and healthier in school than out.

As for the teachers and students in high school and college, there appears no sufficient reason why they should need a longer vacation than other brain workers.

A Bachelor's Course of Three Years.—If the higher institutions which offer courses leading to bachelors' degrees should adopt the four-term plan, there could be no complaint from any quarter at their granting the bachelor's degree at the end of three years, for the actual time spent in course would be the same as under the prevailing four-year plan. Under a combination of the group system and the four-term plan, a good student could in two years satisfy all legitimate requirements for a bachelor's degree. The needs of others, who would require more than two years and less than three for the completion of a course, could be met by holding semi-annual commencements. This plan, or some modification of it, has been used successfully by institutions as diverse in aims and methods of work as private normal schools and Chicago University. With the passing of the traditions of a four-year course and an annual commencement will pass also much wasting of the time and energy of the student.

(d) Educational Experimentation

It is a noteworthy fact that most speaking and writing upon educational administration is largely theoretical. The questions have usually been approached from the *a priori* standpoint, and therefore education is not yet a science.

But it is clear that in education as in everything else,

the scientific method of advance is the only one from which real results may be expected. Hence the imperative need of broad observation, experimentation, and induction. The only way to determine whether a plan of school administration is workable is to work it for a *sufficiently long period of time*, and carefully to note results. There has been more or less conscious experimentation in the past decade or so, but it has been too sporadic, too brief, and its results too little tested and verified by others to make it of much value.

Educational Observation.—In order to secure facts upon which to base intelligent experimentation, much observation of prevailing educational methods should be done. Such observation has been carried on over a large area by the General Education Board, and the data are published in "Southern Education," Knoxville, Tenn.¹ Similar work in individual schools has been going on actively under the direction of Dr. J. M. Rice, Director of the Society of Educational Research. These and many other observations on actual school work and its results should be carefully tabulated and digested by a committee of experts, appointed by the National Educational Association, and the conclusions published widely. The committee should also recommend, from year to year, certain definite experiments to be made.

Practical Difficulties.—Several practical difficulties lie in the way of thorough educational experimentation. Of these, educational conservatism is perhaps the chief. School boards, superintendents, and patrons all dislike or fear to leave the beaten track.

Short tenure of office by boards and superintendents is another obstacle. It is safe to say that trustworthy re-

¹ See Review of Reviews, 30: 327.

sults can not be reached in a shorter time than five years, because the true test of a method of teaching or of school administration is the effect it has upon the pupil's later work.

Still another difficulty is the impossibility of securing identity of conditions in different schools, or even in the case of different pupils of the same grade. In the physical laboratory, identity of conditions, of apparatus, of manipulation, is required and is easily obtained. It can not be so in the educational laboratory. Nevertheless, much valuable experimentation can and should be done in school work. As has been suggested by Hanus, every system of schools may be made an "experiment station," where careful and sympathetic investigation can be carried on.

All schools that have, or can secure, the means for such work should keep a card record of the post school life of all the pupils that leave the school at the end of the seventh year or after. Some arrangement should be made by which such pupils may be heard from at least once a year. The proper keeping of such a record would be an enormous task, but in no other way can data be collected from which to draw trustworthy conclusions as to the value of different modes of school administration, different methods of teaching, and the relative influence of environment, heredity, and schooling.

Educational Bulletins.—Just as the results of the experiments made at the various agricultural experiment stations throughout the U. S. are sent out in regularly issued bulletins to thousands of farmers every month, so should the processes and results of educational experiments be sent out free to every school interested in the particular experiments reported. Such bulletins are

issued and distributed by several States, notably Pennsylvania and Wisconsin, and the National Bureau of Education at Washington has an enormous mailing list for its incomparable reports. But what is needed is that every superintendent and principal in the United States shall receive at short intervals clear reports of actual work being done in educational experiments. Those engaged in the actual work of teaching should be given every encouragement to undertake a verification of results reached by experiment already made, and to report results carefully and fully to some central authority. Further, no good reason appears why the Federal Government should not extend the franking privilege to such bulletins, under the same conditions as now govern the mailing of agricultural bulletins.

III. CORRELATION OF SCHOOL AND COMMUNITY

(1) THE INSTITUTIONAL FACTORS OF EDUCATION

As previously said, education is, according to its organization, *formal* or *informal*. Formal education is carried on by specialized agencies and, as the term indicates, under definite forms.

The chief institution established by the community for formal education is the school; but other institutional factors have great importance. Of these, the most effective are (1) the home; (2) the church, including the Sunday school; (3) the press; (4) the platform. The home is placed in this list, because, although it can hardly be claimed as an institution primarily established for educative purposes, yet its development and training of the young are largely formal and of the first importance. Other agencies which now are best classed as informal — such as the library, the museum, and the art gallery, are rapidly being brought into the list of formal factors. On the other hand, all those classed as formal exert great influence in informal ways, — that is, without definite teaching purpose, but through their own suggestive influence and the imitativeness of the young.

As the tide of popular interest in education rises, the conviction grows that all institutions which make for the higher life of the community may be brought into the

service of formal, purposive education. It is certain, also that the educative efficiency of these institutions is greatly increased if they work in sympathetic coöperation with one another. Too often the home and the school are not in cordial sympathy; the church berates the school, and the school is indifferent to the church, and both decry the stage; rich libraries have scarcely a tenth of their educative value used, and that in only a desultory way, while art galleries and museums are used merely as "show" places. This sort of waste will cease, when a community comes to understand and appreciate the specific value of each of these factors in the work of education, and that neither has cause for jealousy or indifference regarding the others.

The school is naturally the center around which all other factors can be most effectively grouped.

(2) CORRELATION OF OTHER FACTORS WITH THE SCHOOL¹

A. THE HOME WITH THE SCHOOL

There are thousands of parents, not only in the large cities but in the smaller towns and the country as well, who have never visited the schools which their children attend and do not even know their children's teachers at sight.

The Teacher's Visit to the Home.—To overcome the indifference of the home to the school, the teacher must take the initiative and visit the homes, all of them if possible, certainly those where her coming is most needed. Nor must her visits be perfunctory or intrusive; in no instance is it truer that "the letter killeth, but the spirit maketh alive." Only through such sympathetic contact,

¹ Refer to Dutton's "Social Phases of Education."

as this should be, with the parents and the children in the home, can the teacher learn the conditions which account for much of the pupil's intellectual and moral activity or deficiency. Also, in no other way so well can the home be brought to a sympathetic response to the demands which the school may legitimately make upon it. The "personal touch," if genuinely sympathetic, always wins.

Among the patrons of the school there will most probably be some whom, on account of their social position, the teacher should not visit without an invitation. In such cases, the duty and responsibility of bringing the home into sympathetic correlation with the school rests upon the patrons, not the teacher. It seems clear that a public school teacher may have to teach children of homes she would never visit in a social way, and equally clear that no parent should send his children to a teacher whom he would be unwilling to have in his home as a social visitor. If parents should invite to their homes the teachers of their children, and make them welcome there, only good could result.

The School Nurse.—In some of the larger cities, the board of education provides school nurses and medical inspectors, and these officials are helpful in bringing the home and the school into sympathetic relation. The nurse visits the school daily, inspects the children, gives immediate aid where only something simple is needed, and indicates the cases that seem to require examination by the medical inspector. She goes to the homes of the children that must, for sanitary reasons, be sent away from school for awhile, makes suggestions as to their care, helps the mothers, and sees that the children get back into school as soon as they are able. This sort of work forges a strong link between the home and the school.

“Mothers’ Meetings.”—Regular meetings in which teachers and mothers confer together about the needs of the children and the work of the school, have proved to be a potent factor in strengthening the hold of the school upon the home. Such meetings smooth away mutual misunderstandings, show to the teacher and to the mother each other’s view point, enlist the sympathy of each in the work and trials of the other, and bring school and home into intelligent coöperation. The home will gain an appreciation of what the school is trying to do and of the difficulties in the way of doing it. The school will learn that the homes have rights and limitations which must be considered and regarded. The good resulting from such meetings and conferences will be greatly increased if parents will visit the school and inspect its work.

Parents’ Visits to the School.—School officials and teachers should use every effort to arouse in parents an interest in the work being done for their children, sufficient to induce them to visit the schools often. Such visits will do much to convince both teacher and parent that neither can do the best for the pupil without the help of the other. The parent will be aroused to greater interest in the work of the child, and the teacher will feel a more personal concern in each pupil.

Anything is good which brings the teacher and the parents into closer touch, gives the parents a clearer comprehension of what the school is doing and leads the teacher to a deeper appreciation of home conditions.

Mutual understanding and sympathy, and easier work for both the school and the home, always result from this correlation.

B. THE LIBRARY WITH THE SCHOOL ¹

No other factor, outside the home and the school, is so potent for right education as the public library. This fact is being recognized and pressed home to-day upon school superintendents and librarians as never before.

The school, of course, should always have a library of its own; even in each room there should be a few selected books for the exclusive use of the teacher and pupils in that room. But the school can not afford all the books that are needed, and the public library, which must do much for culture in the after-school life, should be brought into close coöperation with the school. Such coöperation enlists the interest of the whole community in both the library and the school, and directs the young to the richer field for the cultivation of which the school is only a preparation.

Each School a Branch Library.—The best arrangement is one by which the library comes into the school, and through the school into the home. To this end, every school, whether in country or city, should be made a branch library for the distribution of books. The rural schools should be supplied from the state department of education. This is the general plan in Ohio, for example. Any board of school directors can make a requisition upon the state librarian for thirty or forty books, which can be kept, if desired, for three months. No expense is incurred by the local school authorities, except for transportation. In the cities, the same plan can more easily be carried out.

¹ Report of the Com. on Libraries, N. E. A., 1899; Proceedings of N. E. A., 1897: 1015; 1900: 636; and 1901: 108; Report of Nat. Commissioner of Ed., 1897-8: 673; Educational Review 8: 358; Review of Reviews 22: 48, 56; The Outlook 70: 420; Atlantic Monthly 90: 402; Reports and Bulletins of the Carnegie Library, Pittsburgh,

The Teacher and the Library.—The books sent to the several schools should be selected for that purpose by the teacher, who must, of course, know what books are suited to the needs of her pupils. The only way in which the teacher can gain this knowledge is by reading the books; she must be able to say, "I have read this book myself, and I know it will interest you."

It is, in fact, an excellent plan for the teacher, in order to create or stimulate the children's appetite for good books, to read to them. A half hour or hour spent in this way once or twice a week will be most fruitful. Often, an appreciation of what help and pleasure a book may give comes to the child only through the teacher's sympathetic reading aloud of carefully selected matter.

The teacher should be a frequent visitor to the public library, and should familiarize herself thoroughly with its resources. From the knowledge gained in this way she should prepare lists of books, pamphlets, and magazine articles, for collateral reading by her pupils, in history, geography, civics, and literature. Indeed, such lists may be prepared in almost every subject pursued in the grades or in the high school.

The public library should also do much for the teacher herself. There should be a teachers' alcove, filled with the best books and periodicals on child study, educational psychology, method, and history of education. If possible, there should also be a special room set aside for the exclusive use of the teachers.

C. MUSEUMS WITH THE SCHOOL.

In cities, the schools are just beginning to utilize the free museums for the purposes of formal education. The more closely the museum is brought into correlation with

the schools, the more apparent the advantages of such an arrangement become.

The Museum Brought to the School.—As the library sends books to the school to be used there in the daily work, so the museum may send specimens to the school to be used in various ways. Small and simple illustrative cabinets, made up of either real specimens or reproductions, may be sent into the schools for work in the numerous forms of nature study. Simple type forms in botany, zoölogy, and mineralogy would be of great value, even in the grades, and more particularly in the analytico-synthetic presentation of high-school subjects.

In the museums of the larger cities there is abundant material by which to make real and concrete the different epochs of history, including the much neglected but especially rich field of science and invention.

The School Taken to the Museum.—Classes in the various subjects indicated above should be taken often to the museum for a more careful and complete study of subject-matter and illustrative material than is possible with specimens suitable to be sent by the museum to the school. In this way, too, as in the case of the public library, the young citizens learn to use and to appreciate the educational resources of the community outside the school. If the citizen does not learn this use and appreciation when a child he will not be apt to do so when grown, and so the chief value of public libraries and museums will be greatly diminished.

D. ART GALLERIES WITH THE SCHOOL

It is not needful here to add anything to what has been so often said of late years about the value of an appreciation of art. Certain it is that we shall not have beauty

abundant in the home, in the school, and in the city street, until a generation shall be raised up that shall understand and enjoy the beauty of painting, sculpture, and architecture.

It is as much the business of the public school to cultivate the understanding and enjoyment of art as it is its business to cultivate the understanding and enjoyment of literature.

But few schools can afford the pictures needed for a training in the appreciation of art, and hence the need of bringing the public art gallery or the private collection into correlation with the school.

Lending Pictures to the School.—As the free library of to-day sends selected books into the schools, there to afford knowledge and inspiration and culture, so the public art gallery sends selected pictures into the schools for the same purpose. Some of the pictures thus loaned may be wall pictures, and others in the form of engravings, photographs, and cuts, contained in portfolios. They should all be selected with a definite purpose to illustrate and make more attractive some particular line of study or reading, or simply to appeal as strongly as possible to the æsthetic and artistic instinct.

The School in the Art Gallery.—The plan so successfully used at the Carnegie Institute in Pittsburgh may be made effective wherever there is a public art gallery or a private collection to which access is permitted. At the opening of the schools, the teachers are invited to the Art Department of the Institute and there have the beauty and the purpose of the best pictures explained by the director or some of his staff. Groups of pupils are also taken by their teachers, from time to time, to the gallery and are taught what to see and how to see. Occasional

informal lectures upon different phases of art are given to teachers and pupils. In such ways is the value of the art gallery increased to the schools and to coming generations of adults.

E. THE PRESS WITH THE SCHOOL

No institution in America is quite so clearly or definitely in the focus of popular regard to-day as is the public school. Never before has the news and periodical press devoted so much space to the discussion of this and other agencies of popular education. Schoolmen everywhere should be quick to avail themselves of this opportunity to promote a real economy of educational forces, by bringing the willing press into closer correlation with the schools and their work.

The superintendent can do no better thing for his schools or for his community than to furnish to the local papers weekly, or even daily, reports of the condition of the schools and the work they are actually doing. If the board of education is wise it will heartily coöperate with the superintendent in this work and will furnish full reports of its own official acts. The people are entitled to know what their own schools are doing, and the papers are usually glad to publish the facts and to support good work.

F. THE PULPIT WITH THE SCHOOL.

In some sections of the country, where most earnest efforts are being made to arouse popular interest in public education, the coöperation of the pulpit has been enlisted. The ministers, throughout a given area, all preach on the same day upon some theme directly related to the work of the schools and their needs. The plan has already proved its value and is being widely adopted.

(3) PROJECTION OF THE SCHOOL INTO THE COMMUNITY

A. SCHOOLHOUSES AS COMMUNITY CENTERS

Practically everywhere, except in a few large cities, schoolhouses stand unused from three to five months out of every year, and during the time they are in service, are used only for the teaching of children. Educational economy calls loudly for the prevention of the waste resulting from this condition. Every schoolhouse should be used as a *community center of education*. It need not be considered as even primarily for the children of the community; it exists quite as much for the adults also. Nothing will do more to carry forward into adulthood that impulse to study and to the intellectual life, which it is one of the chief purposes of the school to give, than the use of the schoolhouse as a nucleus and rallying point for various neighborhood interests, literary societies, women's clubs, farmers' institutes, reading circles, lecture courses, in short, everything not of a partisan or sectarian character. Every schoolhouse, whether in country or town, should be planned and built with this wider use in view. There should be ample seating facilities and adequate means of artificial lighting.

The plan of "consolidating schools and transporting pupils" lends itself well to this larger usefulness of schoolhouses. The vehicles used for conveying children to school may be used to convey the older pupils and the adults to the schoolhouse on Saturdays or Sundays, or at night.

The "Hesperia Movement."—The form of coöperation known as the "Hesperia movement" is typical of the modern projection of the school into the rural commun-

ity¹ and is suggestive of other modes of organizing the intellectual and social forces of a neighborhood around the school.

This movement, named from the place of its origin, (Hesperia, Michigan,) has most successfully brought teachers and patrons in the rural districts into close and helpful educational and social coöperation. In some cases meetings occur only once a year, in others, every month, or oftener. At these meetings papers are read by teachers and patrons, there are discussions not only of educational matters but of other live topics of the day, and often the meetings are addressed by lecturers of national reputation. Special reading courses are also carried on, and use is made of every means of intellectual and social culture.

There is hardly a rural community in the United States where something of this sort may not be done, on a larger or smaller scale, with the people's schoolhouse as a center and meeting place.

In Cities.—It is easier in cities than in the country to make the schoolhouse a community center. It has been recommended, as a measure of economy, that when a city schoolhouse is built, a small auditorium to accommodate five or six hundred persons be incorporated in it. It would add but little to the total cost to include also in the building a room suitable for a small public library and reading room. Wherever these additions are made to the facilities which a community offers for adult education, it may be expected that, in answer to a popular demand, other rooms will be provided in public school buildings for neighborhood clubs, for adult classes in the elements of domestic science, for various forms of manual training for adults, and for night classes.

¹ See Review of Reviews, Vol. 23, p. 443.

But there is no need to wait until this more genuine economy has reached the pockets of the taxpayers, in order to use public school buildings in the wider service. Under watchful but sympathetic supervision the ordinary grade rooms of any school building may be used for all the purposes named above, except the heavier forms of manual training; and even these are being provided for in most schools that give their pupils the advantage of the best courses of study.

The idea which has so long held sway, that the school-houses are for the use of children only, is false and pernicious, and has been the cause of appalling educational waste. If it is advisable to support, at great cost, by public taxation, universities for the education of adults who have already had all that public elementary and secondary education can give them, surely it is simple justice for the state or city to provide other adults, at far less expense, with opportunities and facilities for the education which they were compelled, as children, to forego.

B. PUBLIC PLAYGROUNDS AND VACATION SCHOOLS

Cautiously and with misgivings, the school authorities of New York and other cities yielded to the urgent request of private philanthropic organizations, that the playgrounds and play rooms of the public schools be opened in the vacation months for directed play and other forms of outdoor education. Now, in these cities such use of school playgrounds, recreation piers, and parks, constitute an integral and unquestioned part of the educational service which the public pays for, and by which it is benefited even more than by the regular work of the schools. If vacation schools in cities did no more than

take the children off the physically and morally unhealthy streets during a part of the summer, they would be fully justified. These schools not only do this, but they also provide instruction and training in the several forms of manual expression, in the domestic and industrial arts, and are used as centers of social and civic life. They offer excellent opportunities for experimental work, and in them various problems of teaching and of school administration may be conclusively tried out. What has been done in New York may be done on a smaller scale, but quite as effectively, wherever a few determined spirits unite in an effort to apply, in the vacation months, the simpler forms of formal education to the spontaneous activities, physical as well as mental, of children.¹

C. EDUCATIONAL EXTENSION.

Under the term "educational extension" is meant here to be included all movements having for their object the carrying of knowledge or culture directly to the people through other agencies than the school or college. The "lyceum" which flourished in the earlier half of the nineteenth century, university extension, which drew so much attention in the last quarter of that century, the "Chautauqua movement," and correspondence instruction, are all types of educational extension.

The Pupils of Educational Extension.—In every community there are persons who, through force of circumstances or perversity of premature choice, have had

¹ All who are interested in this subject of vacation schools and playgrounds will find facts and suggestions of the highest value in the references here given: The latest Report on Vacation Schools and Play-grounds in N. Y. City; Reports on the same subjects, from the "League for Social Service," N. Y. City; Articles upon these topics in Harper's Magazine, 105: 22; 107: 527; Outlook 72: 30; Independent 56: 165; Pedagogical Seminary 9: 237; Review of Reviews 16: 190; 17: 710; Report of Nat. Commissioner of Education (Wash. D. C.), '94-5, Vol. 1, p. 83, Vol. 2, p. 1484; '97-8.

only an elementary education. There are others who have had the higher schooling, but whose business cares have prevented the pursuit of knowledge or culture, outside of their vocation. To meet the needs of all these, educational extension developed.

The work that has been carried forward in New York since 1891 is so illustrative and suggestive that a brief description of it is given as an excellent example of true educational economy.¹

In New York.—In 1891 the state of New York appropriated \$10,000.00 to the work of University Extension. The agencies of this extension service are libraries, extension teaching by lectures or otherwise, directed home study, and summer schools. The field has enlarged greatly in the last few years, and now these factors of intelligence and culture reach and help more than two millions of adults annually in the state of New York.

Lists of books, outlines, syllabi, and test questions on work done are sent out to the remotest hamlets. Bulletins of detailed information and directions are sent out from Cornell to all who are engaged in the agricultural and domestic arts. From the same center are also distributed leaflets to teachers and others interested in nature study. University and college professors, high school teachers, and any others who can arouse interest, impart information, or deliver a message, are induced to give their services, at a nominal cost, in lecturing and teaching outside the walls of their schools.

There is, under the control of the state, a splendid library system, with both fixed and traveling libraries.²

¹ Report of Nat. Commissioner of Ed., 1899-00, 1: 303; *World's Work*, 4: 2211; 5: 3327; Bulletin 276, University of the State of N. Y. (in N. Y. City), Forum 29: 332.

² Univ. of N. Y., Home Ed. Dept., Bulletin 40, Albany.

One of the most valuable features of the New York system of "adult education" is the *traveling lantern lecture*. Under state direction and at state expense fine slides are made illustrative of travel, nature study, and historic events, and these, together with a carefully written lecture and a complete lantern equipment, are loaned to any study center requesting them and complying with a few liberal conditions.

No other state is doing so much for the dissemination of intelligence among its adult citizens, perhaps no other can do so much. But there is no school, no matter how poor or where situated, that can not become a center of educational extension to an extent proportionate to its environment. Such work can be done by any small college or high school, if only the trustees and the teaching corps will see and grasp their opportunity. In one well-known institution in the South, resting upon private endowment, extension work among "Appalachian Americans" is made a prominent feature, and members of the faculty are kept in the field for months at a time, with lantern outfits, giving illustrated lectures throughout the mountains, in every court house, church and school-house. The result has been the rapid awakening of a people.

The desire of the people for increased knowledge, and their readiness to make use of any facilities to secure it, are further evidenced by the rapid growth in late years of correspondence schools, Chautauqua circles, and home-study clubs. To aid in the increase and improvement in these means of intellectual growth seems clearly the duty of all who are interested in the truest economy of human intelligence, character, and personality.

Education as a Subject of Extension Work.—The

severest indictment that has been brought by the critics of the public school is that the people who have had its advantages often give it such grudging support. This fact justifies the suggestion that education itself be made one of the most prominent subjects of extension work. There is no community, no matter how backward and indifferent, that could not be roused to greater effort in behalf of its schools, by a series of clear-cut, popular lectures upon education, especially if these are illustrated by lantern views contrasting the fit and the unfit in rural and village schoolhouse construction and equipment, and by graphic statistical charts showing the ratio of productivity and wealth to expenditures for schools in various communities.

There is not a district that could not be benefited by the service of an *educational evangelist* working along these lines.

Educational Expositions.—The object lesson is as serviceable in informing adults upon the subject of education as it is in instructing and interesting their children in the common branches. Bearing this in mind, the teacher, principal, or superintendent who wants to interest his patrons in good school work should make the school exposition prominent, both throughout his annual term and at its close. The county superintendent should promptly avail himself of the best representative work of the individual schools, and place it prominently on display at the county associations and institutes, where it will be not only a source of inspiration to the teachers, but a means of information and a stimulus to the general public.

This material could also be exhibited at the county fair, with most excellent results. Anything is good

which keeps the public schools and their work prominently before the people.

Exhibits of Model Schools and Schoolhouses.—Good as it is to keep the actual work of the pupils before the public, it is even better to show the good teacher at work with proper facilities. In almost any rural community the schools could be greatly improved by placing at country fairs, or other local gatherings, a *model school-house*, and providing also for actual teaching therein by a skillful and experienced teacher. The house, which would have to be portable, should be a correct model in all its proportions, and in its equipment for heating, ventilating, lighting, seating, etc. It would be true economy for the state educational office of any state to keep several such houses in the field throughout the summer. A plan similar to this has been used with excellent results in illustrating the best methods of agriculture in some of the great agricultural states.¹ There is every reason why the public education office of any state should carry on such a propaganda in stimulating educational activity.

The road upward from ignorance, want, narrowed lives, and materialistic and selfish ideals, is a long and steep one. The summits to which it leads will not be reached in one or in two or in a dozen generations of men. But each year of such correlation of schools and community as is now everywhere going forward, will put heart and strength into the climber

¹ "Iowa's campaign for better corn," *Review of Reviews*, 30: 563.

of the upward way, and a people shall be developed who will have power and skill, strength and refinement, time and ability to read a little of the best literature, to have and enjoy good music and pictures, to cultivate self-control, personal poise, and the gentle graces of life all the more needed in a strenuous age.

Merely to live in the midst of this awakening, to see the splendid sweep and trend of this movement to socialize and democratize the schools, is a blessed privilege. To have however small a share in it, to be able to say in later years, "I was a part of it," will be honor and happiness.

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